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1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division for Air Quality

4 (Amended After Comments)

5 401 KAR 51:001. Definitions for 401 KAR Chapter 51.

6 RELATES TO: KRS 48.010(15)(a), 224.01-010, 224.20-100, 224.20-110, 224.20-
7 120, 40 C.F.R. Chapter I, 50 Appendices A-R, 51.100[(s)], 51.121, 51.165, 51.166, 51
8 Appendix S, 52.920, 53, 60, 60 Appendices A, B, 61, 61 Appendix B, 63 Appendices A-
9 D, 70.2, 75, 82, 96, 42 U.S.C. 7401-7671q [~~EO 2009-538~~]

10 STATUTORY AUTHORITY: KRS 224.10-100(5) [~~EO 2009-538~~]

11 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the
12 cabinet to promulgate administrative regulations for the prevention, abatement, and
13 control of air pollution. [~~EO 2009-538, effective June 12, 2009, establishes the Energy~~
14 ~~and Environment Cabinet.~~] This administrative regulation defines the terms used in 401
15 KAR Chapter 51. The definitions contained in this administrative regulation are neither
16 more stringent nor otherwise different than the corresponding federal definitions.

17 Section 1. Definitions. The definitions with citations to the Code of Federal
18 Regulations shall be governed by 40 C.F.R. Parts 50 through 96, effective July 1,
19 2010.

20 (1) "Acid rain emissions limitation" means a limitation on emissions of SO₂ or NO_x
21 imposed by the Acid Rain Program under 42 U.S.C. 7651 to 7651o.

1 (2) "Actual emissions":

2 (a) Means the actual rate of emissions of a regulated NSR pollutant from an
3 emissions unit as determined according to the following:

4 1. Actual emissions as of a particular date equals the average rate, in tons per
5 year, at which the unit actually emitted the pollutant during a consecutive twenty-
6 four (24) month period, that precedes that date and is representative of normal
7 source operation, unless a different time period is more representative of normal
8 source operation; and

9 2. The unit's actual operating hours, production rates, and types of materials
10 processed, stored, or combusted during the selected time periods are used to
11 calculate actual emissions;

12 (b) Means source-specific allowable emissions for the unit are equivalent to
13 actual emissions of the unit if the cabinet has made an equivalency determination
14 pursuant to 40 C.F.R. 51.166;

15 (c) Means, for an emissions unit that has not begun normal operations on a
16 particular date, the potential to emit of the unit on that date; and

17 (d) Does not mean:

18 1. Calculating if a significant emissions increase has occurred; or

19 2. Establishing a PAL under 401 KAR 51:017, Section 20, [is defined by 40
20 C.F.R. 51.166(b)(21).]

21 (3) "Actuals PAL" or "PAL" means a plant-wide applicability limit established for
22 a major stationary source based on the baseline actual emissions of all
23 emissions units at the source that emit or have the potential to emit the PAL

1 ~~pollutant. [is defined by 40 C.F.R. 51.166(w)(2)(i).]~~

2 (4) "Adverse impact on visibility" is defined by 40 C.F.R. 51.301.

3 (5) "Affected facility" means an apparatus, building, operation, road, or other entity
4 or series of entities that emits or may emit an air contaminant into the outdoor
5 atmosphere.

6 (6) "Air contaminant" is defined by KRS 224.01-010(1).

7 (7) "Air pollutant" means air contaminant.

8 (8) "Air pollution" is defined by KRS 224.01-010(3).

9 (9) "Air pollution control equipment" means a mechanism, device, or contrivance
10 used to control or prevent air pollution, that is not, aside from air pollution control laws
11 and administrative regulations, vital to production of the normal product of the source or
12 to its normal operation.

13 (10) "Allocate" or "allocation" means the number of NOx allowances to be
14 credited to a NOx budget unit. [is defined by 40 C.F.R. 96.2.]

15 (11) "Allocation period" means each three (3) year period beginning May 1, 2004.

16 (12) "Allowable emissions" means:

17 (a) The emissions rate of a stationary source calculated using the maximum
18 rated capacity of the source, unless the source is subject to federally enforceable
19 limits that restrict the operating rate, hours of operation, or both, and the most
20 stringent of the following:

21 1. The applicable standards codified in 40 C.F.R. Parts 60 and 61;

22 2. The applicable SIP emissions limitations, including those with a future
23 compliance date; or

1 3. The emissions rates specified as a federally enforceable permit condition,
2 including those with a future compliance date; or

3 (b) For an actuals PAL, the emissions rate of a stationary source calculated
4 considering any emission limitations that are enforceable as a practical matter on
5 the emissions unit's potential to emit, and the most stringent provision of
6 paragraph (a)1. through 3. of this subsection. [is defined by:

7 (a) 40 C.F.R. 51.166(b)(16); or

8 (b) 40 C.F.R. 51.166(w)(2)(ii) for an actuals PAL.]

9 (13) "Alteration" means:

10 (a) The installation or replacement of air pollution control equipment at a source; or

11 (b) A physical change in or change in the method of operation of an affected facility
12 that increases the potential to emit a pollutant, to which a standard applies, emitted by
13 the facility or that results in the emission of an air pollutant, to which a standard applies,
14 not previously emitted.

15 (14) "Alternative method" is defined by 40 C.F.R. 60.2. For purposes of this
16 definition, "administrator" means both the U.S. EPA and the cabinet.

17 (15) "Ambient air" means that portion of the atmosphere, external to buildings,
18 to which the general public has access. [is defined by 40 C.F.R. 50.1(e).]

19 (16) "Ambient air quality standard" means a numerical expression of a specified
20 concentration level for a particular air contaminant and the time averaging interval over
21 which that concentration level is measured and is a goal to be achieved in a stated time
22 through the application of appropriate preventive or control measures.

23 (17) "ANSI" means American National Standards Institute.

1 (18) "AOAC" means Association of Official Analytical Chemists.

2 (19) "ASTM" means American Society for Testing and Materials.

3 (20) "Baseline actual emissions" means the rate of emissions, in tons per year,
4 of a regulated NSR pollutant, that:

5 (a) For an existing electric utility steam generating unit (EUSGU), the unit
6 actually emitted during any consecutive twenty-four (24) month period selected
7 by the owner or operator within the five (5) year period immediately preceding the
8 date the owner or operator begins actual construction of the project, unless a
9 different twenty-four (24) hour time period is more representative of normal
10 source operation.

11 1. The rate is an average that:

12 a. Includes fugitive emissions, to the extent quantifiable, and emissions
13 associated with startups, shutdowns, and malfunctions;

14 b. Is adjusted downward to exclude any noncompliant emissions that
15 occurred while the source was operating above an emission limitation that was
16 legally enforceable during the consecutive twenty-four (24) month period; and

17 c. Is based on any consecutive twenty-four (24) month period for which there
18 is adequate information for determining annual emissions, in tons per year, and
19 for adjusting this amount as necessary according to clause b of this
20 subparagraph; and

21 2. If a project involves multiple emissions units, only one (1) consecutive
22 twenty-four (24) month period is used to determine the baseline actual emissions
23 for the emissions units being changed with a different consecutive twenty-four

1 (24) month period allowed for each regulated NSR pollutant;

2 (b) For an existing emissions unit that is not an EUSGU, the unit actually
3 emitted during any consecutive twenty-four (24) month period selected by the
4 owner or operator within the ten (10) year period beginning on or after November
5 15, 1990, and immediately preceding the earlier of the date the owner or operator
6 begins actual construction of the project or the date a complete permit
7 application is received by the cabinet for a permit required under 401 KAR 51:017
8 or 51:052.

9 1. The rate is an average that:

10 a. Includes fugitive emissions, to the extent quantifiable, and emissions
11 associated with startups, shutdowns, and malfunctions;

12 b. Is adjusted downward:

13 (i) To exclude any noncompliant emissions that occurred while the source
14 was operating above an emission limitation that was legally enforceable during
15 the consecutive twenty-four (24) month period;

16 (ii) To exclude any emissions that would have exceeded an emission
17 limitation with which the major stationary source is required currently to comply,
18 if the source had been required to comply with the limitations during the
19 consecutive twenty-four (24) month period; and

20 (iii) For an emission limitation that is part of a maximum achievable control
21 technology standard proposed or promulgated under 40 C.F.R. Part 63, only if the
22 Commonwealth of Kentucky has taken credit for the emissions reductions in an
23 attainment demonstration or maintenance plan consistent with 40 C.F.R.

1 51.165(a)(3)(ii)(G); and

2 c. Is based on any consecutive twenty-four (24) month period for which there
3 is adequate information for determining annual emissions, in tons per year, and
4 for adjusting this amount as necessary according to clause b of this
5 subparagraph.

6 2. If a project involves multiple emissions units, only one (1) consecutive
7 twenty-four (24) month period is used for each regulated NSR pollutant to
8 determine the baseline actual emissions for the emissions units being changed
9 with a different consecutive twenty-four (24) month period;

10 (c) For a new emissions unit, equals zero for determining the emissions
11 increase that will result from the initial construction and operation of the new unit
12 and thereafter, for all other purposes, equals the unit's potential to emit; or

13 (d) For a PAL for a stationary source, is determined as follows:

14 1. For an existing EUSGU, in accordance with the procedures contained in
15 paragraph (a) of this subsection;

16 2. For other existing emissions units, in accordance with the procedures
17 contained in paragraph (b) of this subsection; and

18 3. For a new emissions unit, in accordance with the procedures contained in
19 paragraph (c) of this subsection, [is defined by 40 C.F.R. 51.166(b)(47).]

20 (21) "Baseline area" means an intrastate area and every part of that area
21 designated as attainment or unclassifiable pursuant to 42 U.S.C. 7407 (d)(1)(A)(ii)
22 or (iii) in which the major source or major modification establishing the minor
23 source baseline date would construct or would have an air quality impact equal to

1 or greater than one (1) $\mu\text{g}/\text{m}^3$ annual average of the pollutant for which the minor
2 source baseline date is established.

3 (a) Area redesignations under 42 U.S.C. 7407(d)(1)(A)(ii) or (iii) do not intersect
4 and are not smaller than the area of impact of a major stationary source or major
5 modification that:

6 1. Establishes a minor source baseline date; or

7 2. Is subject to 401 KAR 51:017 and would be constructed in the
8 Commonwealth of Kentucky.

9 (b) A baseline area established originally for total suspended particulate
10 (TSP) increments remains in effect to determine the amount of available PM_{10}
11 increments, unless the cabinet rescinds the corresponding minor source baseline
12 date. [is defined by 40 C.F.R. 51.166(b)(15).]

13 (22) "Baseline concentration" means the ambient concentration level that exists
14 in the baseline area on the date the applicable minor source baseline date is
15 established. [is defined by 40 C.F.R. 51.166(b)(13).]

16 (23) "Baseline date" means major source baseline date or minor source baseline
17 date and is established for each pollutant for which increments or other equivalent
18 measures have been established if the area in which the proposed source or
19 modification would construct is designated as attainment or unclassifiable pursuant to
20 42 U.S.C. 7407(d)(1)(A)(ii) or (iii) for the pollutant on the date of the source's complete
21 application; and

22 (a) For a major stationary source, the pollutant would be emitted in significant
23 amounts; or

1 (b) For a major modification, there would be a significant net emissions increase of
2 the pollutant.

3 (24) "Begin actual construction" means:

4 (a) Initiation of physical on-site construction activities on an emissions unit
5 that are of a permanent nature and include installation of building supports and
6 foundations, laying underground pipe work, and construction of permanent
7 storage structures; and

8 (b) For a change in method of operations, those on-site activities, other than
9 the preparatory activities, that mark the initiation of the change, [is defined by 40
10 C.F.R. 51.166(b)(11).]

11 (25) "Best available control technology" or "BACT" means an emissions limitation,
12 including a visible emission standard, based on the maximum degree of
13 reduction for each regulated NSR pollutant that will be emitted from a proposed
14 major stationary source or major modification and:

15 (a) Is determined by the cabinet pursuant to 401 KAR 51:017, Section 8, after
16 taking into account energy, environmental, and economic impacts and other
17 costs, to be achievable by the source or modification through application of
18 production processes or available methods, systems, and techniques, including
19 fuel cleaning or treatment or innovative fuel combustion techniques for control of
20 that pollutant;

21 (b) Does not result in emissions of a pollutant that would exceed the
22 emissions allowed by an applicable standard codified in 40 C.F.R. Parts 60 and
23 61; and

1 (c) Is satisfied by a design, equipment, work practice, or operational standard
2 or combination of standards approved by the cabinet, if:

3 1. The cabinet determines pursuant to 40 C.F.R. 51.166(b)(12) that
4 technological or economic limitations on the application of measurement
5 methodology to a particular emissions unit would make the imposition of an
6 emissions standard infeasible;

7 2. The standard establishes the emissions reduction achievable by
8 implementation of the design, equipment, work practice, or operation; and

9 3. The standard provides for compliance by means that achieve equivalent
10 results. [is defined by 40 C.F.R. 51.166(b)(12).]

11 (26) "BOD" means biochemical oxidant demand.

12 (27) "Boiler" means an enclosed fossil or other fuel-fired combustion device
13 used to produce heat and to transfer heat to recirculating water, steam, or other
14 medium. [is defined by 40 C.F.R. 96.2.]

15 (28) "BTU" means British thermal unit.

16 (29) "Building, structure, facility, or installation" means all of the pollutant emitting
17 activities that:

18 (a) Belong to the same industrial grouping or have the same two (2) digit
19 major group code as described in the Standard Industrial Classification Manual;

20 (b) Are located on one (1) or more contiguous or adjacent properties;

21 (c) Are under the control of the same person or persons under common
22 control; and

23 (d) Do not include the activities of a vessel. [is defined by 40 C.F.R.

1 51.166(b)(6).]

2 (30) "C" means degree Celsius (centigrade).

3 (31) "Cabinet" is defined by KRS 224.01-010(9).

4 (32) "Cal" means calorie.

5 (33) "Capital expenditure" is defined by 40 C.F.R. 60.2.

6 (34) "cfm" means cubic feet per minute.

7 (35) "CH₄" means methane.

8 (36) "Clean coal technology" is defined by 40 C.F.R. 51.166(b)(33).

9 (37) "Clean coal technology demonstration project" is defined by 40 C.F.R.
10 51.166(b)(34).

11 (38) "Clinker" means the product of a portland cement kiln from which finished
12 cement is manufactured by milling and grinding.

13 (39) "CO" means carbon monoxide.

14 (40) "CO₂" means carbon dioxide.

15 (41) "COD" means chemical oxidant demand.

16 (42) "Combined cycle system" means a system comprised of one (1) or more
17 combustion turbines, heat recovery steam generators, or steam turbines
18 configured to improve overall efficiency of electricity generation or steam
19 production. [is defined by 40 C.F.R. 96.2.]

20 (43) "Combustion turbine" means an enclosed fossil or other fuel-fired device
21 that is comprised of a compressor, a combustor, and a turbine, and in which the
22 flue gas resulting from the combustion of fuel in the combustor passes through
23 the turbine, rotating the turbine. [is defined by 40 C.F.R. 96.2.]

1 (44) "Commence" means that an owner or operator:

2 (a) Has undertaken a continuous program of construction, modification, or
3 reconstruction of an affected facility, or that an owner or operator has entered
4 into a contractual obligation to undertake and complete, within a reasonable time,
5 a continuous program of construction, modification, or reconstruction of an
6 affected facility; or

7 (b) For construction of a major stationary source or major modification in the
8 PSD or NSR program, has all necessary preconstruction approvals or permits,
9 and:

10 1. Has begun, or caused to begin, a continuous program of actual on-site
11 construction of the source, to be completed within a reasonable time; or

12 2. Has entered into binding agreements or contractual obligations, that cannot
13 be cancelled or modified without substantial loss to the owner or operator, to
14 undertake a program of actual construction of the source to be completed within
15 a reasonable time. [:

16 ~~(a) Means that an owner or operator has undertaken a continuous program~~
17 ~~of construction, modification, or reconstruction of an affected facility, or that an~~
18 ~~owner or operator has entered into a contractual obligation to undertake and~~
19 ~~complete, within a reasonable time, a continuous program of construction,~~
20 ~~modification, or reconstruction of an affected facility; or~~

21 ~~b) is defined by 40 C.F.R. 51.166(b)(9) for the PSD or NSR program.]~~

22 (45) "Commence commercial operation" means to have begun to produce steam,
23 gas, or other heated medium used to generate electricity for sale or use. Except

1 as provided in 401 KAR 51:195 or 40 C.F.R. 96.5:

2 (a) For a unit that is a NOx budget unit under 40 C.F.R. 96.4, on the date the
3 unit commences commercial operation, the date remains the unit's date of
4 commencement of commercial operation even if the unit is subsequently
5 modified, reconstructed, or repowered; or

6 (b) For a unit that is not a NOx budget unit under 40 C.F.R. 96.4, on the date
7 the unit commences commercial operation, the date the unit becomes a NOx
8 budget unit under 40 C.F.R. 96.4 is the unit's date of commencement of
9 commercial operation. [is defined by 40 C.F.R. 96.2.]

10 (46) "Commence operation" means, for a NOx budget unit, to have begun a
11 mechanical, chemical, or electronic process, including start-up of a unit's
12 combustion chamber. Except as provided in 401 KAR 51:195 or 40 C.F.R. 96.5:

13 (a) For a unit that is a NOx budget unit under 40 C.F.R. 96.4 on the date of
14 commencement of operation, the date remains the unit's date of commencement
15 of operation even if the unit is subsequently modified, reconstructed, or
16 repowered; or

17 (b) For a unit that is not a NOx budget unit under 40 C.F.R. 96.4 on the date of
18 commencement of operation, the date the unit becomes a NOx budget unit under
19 40 C.F.R. 96.4 is the unit's date of commencement of operation. [is defined by 40
20 C.F.R. 96.2.]

21 (47) "Complete" is defined by 40 C.F.R. 51.166(b)(22).

22 (48) "Compliance schedule" means a time schedule of remedial measures including
23 an enforceable sequence of actions or operations leading to compliance with a limitation

1 or standard.

2 (49) "Compliance supplement pool" means the quantity of NOx allowances provided
3 to Kentucky by the U.S. EPA to be:

4 (a) Allocated to NOx budget units that achieve early reduction; or

5 (b) Used to assist NOx budget sources that are unable to meet the compliance
6 deadline as provided in 401 KAR 51:180, Section 5.

7 (50) "Construction" means:

8 (a) Fabrication, erection, installation, or modification of an air contaminant
9 source; or

10 (b) For the NSR program, any physical change or change in the method of
11 operation, including fabrication, erection, installation, demolition, or modification
12 of an emissions unit that would result in a change in emissions at an air
13 contaminant source. ["Construction":

14 (a) Means fabrication, erection, installation, or modification of an air
15 contaminant source; or

16 (b) Is defined for use in the PSD or NSR program by 40 C.F.R. 51.166(b)(8).]

17 (51) "Continuous emissions monitoring system" or "CEMS" means all of the
18 equipment necessary to meet the data acquisition and availability requirements
19 of 401 KAR 51:017 or 51:052 to sample, condition (if applicable), analyze, and
20 provide a record of emissions on a continuous basis. [is defined by:

21 (a) 40 C.F.R. 51.166(b)(43) for 401 KAR 51:017; or

22 (b) 40 C.F.R. 51.165(a)(1)(xxxi) for 401 KAR 51:052.]

23 (52) "Continuous emission monitoring system for NOx" or "CEMS for NOx" means

1 the equipment required to sample, analyze, measure, and provide, by readings
2 taken at least once every fifteen (15) minutes of the measured parameters, a
3 permanent record of NOx emissions, expressed in tons per hour for NOx. The
4 following systems are necessary component parts, as required by 40 C.F.R. Part
5 75, included in a continuous emissions monitoring system:

6 (a) Flow monitor;

7 (b) NOx pollutant concentration monitor;

8 (c) Diluent gas monitor (O₂ or CO₂);

9 (d) Continuous moisture monitor; and

10 (e) Automated data acquisition and handling system, [is defined by 40 C.F.R.
11 96.2.]

12 (53) "Continuous emissions rate monitoring system" or "CERMS" is defined by 40
13 C.F.R. 51.166(b)(46).

14 (54) "Continuous monitoring system" means the total equipment, required under the
15 applicable administrative regulations in 401 KAR Chapters 50 to 65, used to sample, to
16 condition (if applicable), to analyze, and to provide a permanent record of emissions or
17 process parameters.

18 (55) "Continuous parameter monitoring system" or "CPMS" is defined by:

19 (a) 40 C.F.R. 51.166(b)(45) for 401 KAR 51:017; or

20 (b) 40 C.F.R. 51.165(a)(1)(xxxiii) for 401 KAR 51:052.

21 (56) "Control period" means the period beginning May 1 of a year and ending on
22 September 30 of the same year, inclusive, [is defined by 40 C.F.R. 96.2.]

23 (57) "Director" means Director of the Division for Air Quality of the Energy and

1 Environment Cabinet.

2 (58) "District" is defined by KRS 224.01-010(11).

3 (59) "dscf" means dry cubic feet at standard conditions.

4 (60) "dscm" means dry cubic meter at standard conditions.

5 (61) "Electric generating unit" means, for 401 KAR 51:160 to 51:195, a fossil fuel-
6 fired boiler, combustion turbine, or a combined cycle system used to generate twenty-
7 five (25) megawatts or more of electricity, some of which is offered for sale.

8 (62) "Electric utility steam generating unit" or "EUSGU" is defined by 40 C.F.R.
9 51.166(b)(30).

10 (63) "Emission standard" means that numerical limit that fixes the amount of an air
11 contaminant or air contaminants that may be vented into the atmosphere from an
12 affected facility or from air pollution control equipment installed in an affected facility.

13 (64) "Emissions unit" means any part of a stationary source, including an
14 EUSGU, that emits or has the potential to emit a regulated NSR pollutant. For 401
15 KAR 51:017 and 51:052, there are two (2) types of emissions units:

16 (a) A new emissions unit, which is any emissions unit that is or will be newly
17 constructed and that has existed for less than two (2) years from the date the unit
18 first operated; and

19 (b) An existing emissions unit, which is any emissions unit that does not meet
20 the requirements in paragraph (a) of this subsection or is a replacement unit, [is
21 defined by:

22 (a) 40 C.F.R. 51.166(b)(7) for 401 KAR 51:017; or

23 (b) 40 C.F.R. 51.165(a)(1)(vii) for 401 KAR 51:052.]

1 (65) "Enforceable as a practical matter" means that the emission or other standards
2 contained in a permit or compliance schedule include:

3 (a) Technically accurate emission standards and the portions of the source that are
4 subject to the standards;

5 (b) A time period adequate to demonstrate compliance with the standards; and

6 (c) The method the source shall use to achieve and demonstrate compliance with
7 the limitations and standards, including appropriate monitoring, recordkeeping, and
8 reporting.

9 (66) "Equivalent method" means a method of sampling and analyzing for an air
10 pollutant that has been demonstrated to the cabinet and the U.S. EPA pursuant to
11 40 C.F.R. 53.3 to have a consistent and quantitatively known relationship to the
12 reference method, under specified conditions. ~~[is defined by 40 C.F.R. 60.2. For~~
13 ~~purposes of this definition, "administrator" means both the U.S. EPA and the~~
14 ~~cabinet.]~~

15 (67) "Excess NOx emissions" means any tonnage of nitrogen oxides emitted by
16 a NOx budget unit during a control period that exceeds the NOx budget
17 emissions limitation for the unit. ~~[is defined by 40 C.F.R. 96.2.]~~

18 (68) "Exempt compound" or "exempt solvent" means an organic compound listed in
19 the definition of volatile organic compound as not participating in atmospheric
20 photochemical reactions.

21 (69) "Existing source" means a source that is not a new source.

22 (70) "Extreme nonattainment county" or "extreme nonattainment area" means a
23 county or portion of a county designated extreme nonattainment for the national

1 ambient air quality standard for ozone.

2 (71) "°F" means degree Fahrenheit.

3 (72) "Federal land manager" is defined by 40 C.F.R. 51.166(b)(24).

4 (73) "Federally enforceable" means all limitations and conditions that are
5 enforceable by the U.S. EPA, including:

6 (a) Requirements developed under 40 C.F.R. Parts 60 and 61;

7 (b) Requirements in the Kentucky State Implementation Plan (SIP) approved
8 by the U.S. EPA; and

9 (c) Any permit requirements established under 40 C.F.R. 52.21 or under the
10 Kentucky SIP approved pursuant to 40 C.F.R. Part 51, Subpart I, including
11 operating permits issued under an EPA-approved program incorporated into the
12 SIP, that expressly requires adherence to a permit issued under the program, [is
13 defined by 40 C.F.R. 51.166(b)(17). For purposes of this definition,
14 "administrator" means the U.S. EPA.]

15 (74) "Federally [-] enforceable permit" means a permit issued under 401 KAR
16 52:020 or 52:030, as appropriate.

17 (75) "Fixed capital cost" means the capital needed to provide all the depreciable
18 components. [is defined by 40 C.F.R. 51.166(b)(55).]

19 (76) "Fossil fuel" means natural gas; petroleum; coal; or a form of solid, liquid,
20 or gaseous fuel derived from natural gas, petroleum, or coal. [is defined by 40
21 C.F.R. 96.2.]

22 (77) "Fossil fuel fired" means, for a unit:

23 (a) The combustion of fossil fuel, alone or in combination with another fuel, if

1 the fossil fuel combusted comprises more than fifty (50) percent of the annual
2 heat input on a BTU basis during a year starting in 1995 or, if a unit had no heat
3 input starting in 1995, during the last year of operation of the unit prior to 1995; or

4 (b) The combustion of fossil fuel, alone or in combination with another fuel, if
5 the fossil fuel is projected to comprise more than fifty (50) percent of the annual
6 heat input on a BTU basis during a year, and the unit is to be fossil fuel fired as of
7 the date during the year the unit begins combusting fossil fuel. [is defined by 40
8 C.F.R. 96.2.]

9 (78) "ft" means feet or foot.

10 (79) "Fuel" means natural gas; petroleum; coal; wood; or a form of solid, liquid, or
11 gaseous fuel derived from these materials for the purpose of creating useful heat.

12 (80) "Fugitive emissions" means [;

13 (a) Means] those emissions that could not reasonably pass through a stack,
14 chimney, vent, or other functionally equivalent opening. [;

15 (b) Is defined by 40 C.F.R. 51.166(b)(20) for 401 KAR 51:017; or

16 (c) Is defined by 40 C.F.R. 51.165(a)(1)(ix) for 401 KAR 51:052.]

17 (81) "g" means gram.

18 (82) "gal" means gallon.

19 (83) "General fund" is defined by KRS 48.010(15)(a).

20 (84) "Generator" means a device that produces electricity. [is defined by 40
21 C.F.R. 96.2.]

22 (85) "gr" means grain.

23 (86) "HCl" means hydrochloric acid.

1 (87) "Heat input" means the product, in MMBTU per unit of time, of the gross
2 calorific value of the fuel, in BTU per lb, and the fuel feed rate into a combustion
3 device, in mass of fuel per unit of time, that:

4 (a) Does not include the heat derived from preheated combustion air,
5 recirculated flue gases, or exhaust from other sources; and

6 (b) Is measured, recorded, and reported to the cabinet. [is defined by 40 C.F.R.
7 96.2. For purposes of this definition, "administrator" means the cabinet.]

8 (88) "HF" means hydrogen fluoride.

9 (89) "Hg" means mercury.

10 (90) "High terrain" is defined by 40 C.F.R. 51.166(b)(25).

11 (91) "hr" means hour.

12 (92) "Hydrocarbon" means an organic compound consisting predominantly of
13 carbon and hydrogen.

14 (93) "Hydrocarbon combustion flare" means:

15 (a) A flare used to comply with an applicable New Source Performance Standard
16 (NSPS) or Maximum Achievable Control Technology (MACT) standard, including uses
17 of flares during startup, shutdown, or malfunction permitted under the standard; or

18 (b) A flare that serves to control emissions of waste streams comprised
19 predominately of hydrocarbons and containing no more than 230 µg/dscm hydrogen
20 sulfide.

21 (94) "H₂O" means water.

22 (95) "H₂S" means hydrogen sulfide.

23 (96) "H₂SO₄" means sulfuric acid.

1 (97) "in" means inch.

2 (98) "Incineration" means the process of igniting and burning solid, semisolid, liquid,
3 or gaseous combustible wastes.

4 (99) "Industrial boiler or turbine" means a fossil fuel-fired boiler, combustion turbine,
5 or a combined cycle system having a maximum design heat input of 250 MMBTU per
6 hour or more that is not an electric generating unit.

7 (100) "Innovative control technology" is defined by 40 C.F.R. 51.166(b)(19).

8 (101) "Intermittent emissions" means emissions of particulate matter into the open
9 air from a process that operates for less than any six (6) consecutive minutes.

10 (102) "J" means joule.

11 (103) "Kg" means kilogram.

12 (104) "l" means liter.

13 (105) "lb" means pound.

14 (106) "Legally enforceable" means the cabinet or the U.S. EPA has the authority to
15 enforce a certain restriction.

16 (107) "Long dry kiln" means a kiln that employs no preheating of the feed and has a
17 dry inlet feed.

18 (108) "Long wet kiln" means a kiln that employs no preheating of the feed and the
19 inlet feed to the kiln is a slurry.

20 (109) "Low terrain" means an area other than high terrain.

21 (110) "Lowest achievable emissions rate" or "LAER" means, for any source:

22 (a)1. The most stringent emissions limitation that is contained in the Kentucky
23 SIP for the class or category of stationary source, unless the owner or operator of

the proposed stationary source demonstrates that the limitation is not achievable; or

2. The most stringent emissions limitation achieved in practice by the class or category of stationary source;

(b) For a major modification, the lowest achievable emissions rate for the new or modified emissions units at the stationary source; and

(c) An emissions limitation that does not exceed the allowable emissions of an applicable standard established pursuant to 40 C.F.R. Parts 60, 61, or 63. [is defined by 40 C.F.R. 51.165(a)(1)(xiii).]

(111) "m" means meter.

(112) "m³" means cubic meter.

(113) "Major emissions unit" means:

(a) Any emissions unit that emits or has the potential to emit 100 tons per year or more of a PAL pollutant in an attainment area; or

(b) Any emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant as defined by the Clean Air Act, 42 U.S.C. 7401-7671q for nonattainment areas. [is defined by 40 C.F.R. 51.166(w)(2)(iv).]

(114) "Major modification" means a physical change in or a change in the method of operation of a major stationary source that results in a significant emissions increase and a significant net emissions increase of a regulated NSR pollutant.

(a) A significant emissions increase from any emissions units or net

emissions increase at a major stationary source that is significant for volatile organic compounds or nitrogen oxides is considered significant for ozone.

(b) A physical change or change in the method of operation does not include:

1. Routine maintenance, repair, and replacement;

2. Use of alternative fuel or raw material by reason of an order or a natural gas curtailment plan in effect under a federal act;

3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

4. Use of an alternative fuel or raw material by a stationary source that:

a. The source was capable of accommodating before January 6, 1975, for 401 KAR 51:017, or December 21, 1976, for 401 KAR 51:052; unless the change would be prohibited by a federally enforceable permit condition that was established after January 6, 1975, for 401 KAR 51:017, or December 21, 1976, for 401 KAR 51:052, pursuant to 40 C.F.R. 51.165 or 51.166; or

b. The source is approved to use by a permit issued pursuant to 401 KAR 51:017 or 51:052;

5. An increase in the hours of operation or in the production rate, unless the change is prohibited by any federally enforceable permit condition established after January 6, 1975, for 401 KAR 51:017 or December 21, 1976, for 401 KAR 51:052 pursuant to 40 C.F.R. 52.21; after June 6, 1979, pursuant to 401 KAR 51:015; after September 22, 1982, pursuant to 401 KAR 51:017; or pursuant to 401 KAR 52:020 and 51:016E;

6. A change in ownership at a stationary source;

1 7. The installation, operation, cessation, or removal of a temporary clean coal
2 technology demonstration project, if the project complies with the Kentucky SIP
3 and other requirements necessary to attain and maintain the national ambient air
4 quality standards during the project and after it is terminated;

5 8. The installation or operation of a permanent clean coal technology
6 demonstration project that constitutes repowering, if the project does not result
7 in an increase in the potential to emit of a regulated pollutant emitted by the unit,
8 on a pollutant-by-pollutant basis; or

9 9. The reactivation of a very clean coal-fired electric utility steam generating
10 unit.

11 (c) Instead of this definition, the definition for "PAL major modification", in
12 subsection (175) of this section, is used for a particular regulated NSR pollutant,
13 if the major stationary source is complying with the requirements of 401 KAR
14 51:017, Section 20, and 401 KAR 51:052, Section 11, for a PAL for that pollutant.
15 [is defined by:

16 (a) 40 C.F.R. 51.166(b)(2) for 401 KAR 51:017; or

17 (b) 40 C.F.R. 51.165(a)(1)(v) for 401 KAR 51:052.]

18 (115)"Major NSR permit" means a permit issued under Kentucky's PSD or NSR
19 program.

20 (116) "Major source" means a source with a potential emission rate equal to or
21 greater than 100 tons per year of any one (1) of the following pollutants:
22 particulate matter, sulfur oxides, nitrogen oxides, volatile organic compounds,
23 carbon monoxide, or ODS. [is defined by 40 C.F.R. 70.2. For purposes of chapter

1 51, "subject to regulation" is defined by this administrative regulation.]

2 (117) "Major source baseline date" means:

3 (a) For particulate matter and sulfur dioxide, January 6, 1975; and

4 (b) For nitrogen dioxide, February 8, 1988. [is defined by 40 C.F.R.
5 51.166(b)(14)(i) and (iii).]

6 (118) "Major stationary source" means:

7 (a)1. A stationary source of air pollutants that emits, or has the potential to
8 emit, 100 tons per year or more of a regulated NSR pollutant, except that:

9 a. For ozone nonattainment areas; one hundred (100) tons per year or more of
10 volatile organic compounds or nitrogen oxides in a marginal or moderate ozone
11 nonattainment area; fifty (50) tons per year or more of volatile organic
12 compounds or nitrogen oxides in a serious ozone nonattainment area; twenty-
13 five (25) tons per year or more of volatile organic compounds or nitrogen oxides
14 in a severe ozone nonattainment area; or ten (10) tons per year or more of volatile
15 organic compounds or nitrogen oxides in an extreme ozone nonattainment area;

16 b. Fifty (50) tons per year or more of carbon monoxide in a serious carbon
17 monoxide nonattainment area where stationary sources contribute significantly
18 to carbon monoxide levels; and

19 c. Seventy (70) tons per year or more of particulate matter (PM₁₀) in a serious
20 PM₁₀ nonattainment area; or

21 2.a. For the PSD program, any of the following stationary sources of air
22 pollutants that emits, or has the potential to emit, 100 tons per year or more of a
23 regulated NSR pollutant: fossil fuel-fired steam electric plants of more than 250

1 million BTU per hour heat input, coal cleaning plants with thermal dryers, kraft
2 pulp mills, portland cement plants, primary zinc smelters, iron and steel mill
3 plants, primary aluminum ore reduction plants, primary copper smelters,
4 municipal incinerators capable of charging more than 250 tons of refuse per day,
5 hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants,
6 phosphate rock processing plants, coke oven batteries, sulfur recovery plants,
7 carbon black plants (furnace process), primary lead smelters, fuel conversion
8 plants, sintering plants, secondary metal production plants, chemical process
9 plants, except ethanol production facilities producing ethanol by natural
10 fermentation under the North American Industry Classification System (NAICS)
11 codes 325193 or 312140, fossil fuel boilers, or combination of fossil fuel boilers,
12 totaling more than 250 million BTU per hour heat input, petroleum storage and
13 transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore
14 processing plants, glass fiber processing plants, and charcoal production plants;
15 and

16 b. Regardless of the stationary source size specified in subclause (i) of this
17 clause, a stationary source that emits, or has the potential to emit, 250 tons per
18 year or more of a regulated NSR pollutant; or

19 3. Any physical change that will occur at a stationary source not otherwise
20 qualifying under this subsection as a major stationary source, if the change will
21 constitute a major stationary source by itself;

22 (b) A source that is major for volatile organic compounds or nitrogen oxides
23 is considered major for ozone; and

- 1 (c) Fugitive emissions are included only if the source belongs to one (1) of the
2 following categories of stationary sources:
- 3 1. Coal cleaning plants with thermal dryers;
4 2. Kraft pulp mills;
5 3. Portland cement plants;
6 4. Primary zinc smelters;
7 5. Iron and steel mills;
8 6. Primary aluminum ore reduction plants;
9 7. Primary copper smelters;
10 8. Municipal incinerators capable of charging more than 250 tons of refuse per
11 day;
- 12 9. Hydrofluoric, sulfuric, or nitric acid plants;
13 10. Petroleum refineries;
14 11. Lime plants;
15 12. Phosphate rock processing plants;
16 13. Coke oven batteries;
17 14. Sulfur recovery plants;
18 15. Carbon black plants (furnace process);
19 16. Primary lead smelters;
20 17. Fuel conversion plants;
21 18. Sintering plants;
22 19. Secondary metal production plants;
23 20. Chemical process plants, except ethanol production facilities producing

1 ethanol by natural fermentation under NAICS codes 325193 or 312140;

2 21. Fossil-fuel boilers, or combination of fossil-fuel boilers, totaling more than
3 250 million BTUs per hour heat input;

4 22. Petroleum storage and transfer units with a total storage capacity
5 exceeding 300,000 barrels;

6 23. Taconite ore processing plants;

7 24. Glass fiber processing plants;

8 25. Charcoal production plants;

9 26. Fossil fuel-fired steam electric plants of more than 250 million BTUs per
10 hour heat input; or

11 27. Another stationary source category that, as of August 7, 1980, is being
12 regulated under 42 U.S.C. 7411 or 7412. ["Major stationary source" is defined by:

13 (a) 40 C.F.R. 51.166(b)(1) for 401 KAR 51:017; or

14 (b) 40 C.F.R. 51.165(a)(1)(iv)(A)(1) for 401 KAR 51:052.]

15 (119) "Malfunction" means a sudden and infrequent failure of air pollution
16 control equipment, process equipment, or a process to operate in a normal or
17 usual manner that is not caused entirely or in part by poor maintenance, careless
18 operation, or other upset condition or equipment breakdown that is reasonably
19 preventable. [is defined by 40 C.F.R. 60.2.]

20 (120) "Mandatory Class I area" means an area identified in 40 C.F.R. Part 81,
21 Subpart D, if the administrator of the U.S. EPA, in consultation with the Secretary of the
22 United States Department of Interior, has determined visibility to be an important value.

23 (121) "Marginal nonattainment county" or "marginal nonattainment area" means a

1 county or portion of a county designated marginal nonattainment for the national
2 ambient air quality standard for ozone.

3 (122) "Maximum design heat input" means the ability of a unit to combust a
4 stated maximum amount of fuel per hour on a steady state basis, as determined
5 by the physical design and physical characteristics of the unit. [is defined by 40
6 C.F.R. 96.2.]

7 (123) "Maximum potential hourly heat input" means an hourly heat input used for
8 reporting purposes if a unit lacks certified monitors to report heat input and is:

9 (a) A value calculated according to 40 C.F.R. Part 75 using the maximum fuel
10 flow rate and the maximum gross calorific value, if the unit intends to use 40
11 C.F.R. Part 75, Appendix D, to report heat input; or

12 (b) A value reported according to 40 C.F.R. Part 75 using the maximum
13 potential flow rate and either the maximum percent CO₂ concentration (in percent
14 CO₂) or the minimum percent O₂, if the unit intends to use a flow monitor and a
15 diluent gas monitor. [is defined by 40 C.F.R. 96.2.]

16 (124) "Maximum potential NOx emission rate" means the emission rate of NOx (in
17 lb per MMBTU) calculated according to 40 C.F.R. Part 75, Appendix F, Section 3,
18 using the maximum potential NOx concentration as defined in 40 C.F.R. Part 75,
19 Appendix A, Section 2, and the maximum percent O₂ or the minimum percent CO₂
20 under all operating conditions of the unit except for unit startup, shutdown, and
21 malfunction. [is defined by 40 C.F.R. 96.2.]

22 (125) "Maximum rated hourly heat input" means a unit specific maximum hourly
23 heat input (MMBTU) that is the higher of the manufacturer's maximum rated

hourly heat input or the highest observed hourly heat input. [is defined by 40

C.F.R. 96.2.]

(126) "µg" means microgram.

(127) "mg" means milligram.

(128) "Mid-kiln firing" means the secondary firing in kilns by injecting solid fuel at an intermediate point in the kiln using a specially designed feed injection mechanism for the purpose of decreasing NOx emissions through:

(a) Burning part of the fuel at a lower temperature; and

(b) Reducing-conditions at the solid waste injection point that may destroy some of the NOx formed upstream in the kiln burning zone.

(129) "min" means minute.

(130) "Minor source baseline date" means:

(a) The earliest date after the trigger date on which a major stationary source or a major modification subject to permit requirements established pursuant to 40 C.F.R. 52.21 or the Kentucky SIP submits a complete application:

1. For particulate matter and sulfur dioxide, the trigger date is August 7, 1977;

and

2. For nitrogen dioxide, the trigger date is February 8, 1988;

(b) For TSP increments, that the originally established date remains in effect to determine the amount of available PM₁₀ increments, unless the cabinet rescinds the minor source baseline date pursuant to 40 C.F.R. 51.166(b)(14)(iv); and

(c) A date established for each pollutant for which increments or other equivalent measures have been established if:

1 1. The area in which the proposed source or modification will construct is
2 designated as attainment or unclassifiable pursuant to 42 U.S.C. 7407 (d)(1)(A)(ii)
3 or (iii) for the pollutant on the date of its complete application pursuant to 401
4 KAR Chapter 52; and

5 2. For a major stationary source, the pollutant will be emitted in significant
6 amounts or a significant net emissions increase of the pollutant will occur for a
7 major modification. [is defined by 40 C.F.R 51.166(b)(14)(ii) – (iv).]

8 (131) "MJ" means megajoules.

9 (132) "mm" means millimeter.

10 (133) "MM" means million.

11 (134) "mo" means month.

12 (135) "Moderate nonattainment county" or "moderate nonattainment area" means a
13 county or portion of a county designated moderate nonattainment for the national
14 ambient air quality standard for ozone.

15 (136) "Modification" means any physical change in, or a change in the method
16 of operation of, an affected facility that:

17 (a) Increases the amount of any air pollutant (to which a standard applies)
18 emitted into the atmosphere by that facility or that results in the emission of any
19 air pollutant (to which a standard applies) into the atmosphere not previously
20 emitted; and

21 (b) Is not solely:

22 1. Maintenance, repair, and replacement that the cabinet determines to be
23 routine for a source category considering available information;

1 2. An increase in production rate of an affected facility, if that increase can be
2 accomplished without a capital expenditure on that facility;

3 3. An increase in the hours of operation;

4 4. Use of an alternative fuel or raw material if, prior to the date a standard
5 becomes applicable to that source type, the affected facility was designed to
6 accommodate that alternative use. A facility is considered to be designed to
7 accommodate an alternative fuel or raw material if that use could be
8 accomplished under the facility's construction specifications as amended prior to
9 the change;

10 5. Conversion to coal required for energy considerations, as specified in 42
11 U.S.C. 7411(a)(8);

12 6. The addition or use of a system or device the primary function of which is
13 the reduction of air pollutants, unless an emission control system is removed or
14 replaced by a system that the cabinet determines to be less environmentally
15 beneficial; or

16 7. The relocation or change in ownership of a source. [(a) "Modification" is
17 defined by 40 C.F.R 60.2;

18 (b) Exceptions to the definition of "modification" are listed in 40 C.F.R
19 60.14(e). For purposes of this definition, "administrator" means the cabinet.]

20 (137) "Monitoring device" means the total equipment, required by an applicable
21 administrative regulation in 401 KAR Chapters 50 to 65, used to measure and record, if
22 applicable, process parameters.

23 (138) "Monitoring system" means a monitoring system that meets the requirements

of any applicable administrative regulation in 401 KAR Chapters 50 to 65. [40 C.F.R. Part 96.]

(139) "MWe" means megawatt electrical.

(140) "N₂" means nitrogen.

(141) "Nameplate capacity" means the maximum electrical generating output (in MWe) that a generator can sustain over a specified period of time if not restricted by seasonal or other deratings as measured with United States Department of Energy standards. [is defined by 40 C.F.R. 96.2.]

(142) "Natural conditions" means those naturally occurring phenomena that reduce visibility as measured in terms of visual range, contrast, or coloration.

(143) "Necessary preconstruction approvals or permits" means those permits or approvals required under the administrative regulations approved to the Kentucky SIP pursuant to 40 C.F.R. 52.920, and federal air quality control laws and regulations established pursuant to 42 U.S.C. 7401-7671g. [is defined by 40 C.F.R. 51.166(b)(10).]

(144)[(a)] "Net emissions increase" means:

(a) For [, for] any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of subparagraphs 1 and 2 of this paragraph exceeds zero:

1. An increase in emissions from a particular physical change or change in method of operation at a stationary source as calculated pursuant to 401 KAR 51:017, Section 1(4), or 401 KAR 51:052, Section 1(2); and

2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise

creditable. Baseline actual emissions for calculating increases and decreases under this paragraph are determined as defined in this section.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if:

1. For construction that commences prior to January 6, 2002, the change occurs between the date ten (10) years before construction on the change commences [i] and the date that the increase from the change occurs; and

2. For construction that commences on and after January 6, 2002, the change occurs between the date five (5) years before construction on the change commences [i] and the date that the increase from the change occurs.

(c) An increase or decrease in actual emissions is creditable only if:

1. The cabinet or the U.S. EPA has not relied on the change in issuing a permit for the source pursuant to 401 KAR 51:017, 51:052, or 40 C.F.R. 52.21; and

2. The permit is in effect at the time the increase or decrease in actual emissions from the particular change occurs.

(d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available. For particulate matter, only PM₁₀ emissions are used to evaluate the net emissions increase for PM₁₀.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that:

1 1. The old level of actual emissions or the old level of allowable emissions,
2 whichever is lower, exceeds the new level of actual emissions;

3 2. The decrease is enforceable as a practical matter at and after the time that actual
4 construction on the particular change begins; and

5 3. The decrease has approximately the same qualitative significance for public
6 health and welfare as that attributed to the increase from the particular change.

7 (g) An increase that results from a physical change at a source occurs if the
8 emissions unit on which construction occurred becomes operational and begins to emit
9 a particular pollutant. A replacement unit that requires shakedown becomes operational
10 only after a reasonable shakedown period, not to exceed 180 days.

11 (h) The term, actual emissions, as defined in subsection (2) of this section does not
12 apply in determining creditable increases and decreases.

13 (145) "New source" means a source, the construction, reconstruction, or modification
14 of which commenced on or after the classification date as defined in the applicable
15 administrative regulation, irrespective of a change in emission rate.

16 (146) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as
17 measured by test methods specified in the Kentucky SIP, [by the cabinet.]

18 (147) "ng" means nanograms.

19 (148) "NO" means nitric oxide.

20 (149) "NO₂" means nitrogen dioxide.

21 (150) "Nonattainment major new source review program" or "NSR program" is
22 defined by 40 C.F.R. 51.165(a)(1)(xxx). For purposes of this definition, "administrator"
23 means the U.S. EPA.

- 1 (151) "NOx" means nitrogen oxides.
- 2 (152) "NOx allowance" is defined by 40 C.F.R. 96.2.
- 3 (153) "NOx Allowance Tracking System" or "NATS" [~~(NATS)~~]" is defined by 40
4 C.F.R. 96.2 For purposes of this definition, "administrator" means the U.S. EPA.
- 5 (154) "NOx authorized account representative" is defined by 40 C.F.R. 96.2.
- 6 (155) "NOx budget emissions limitation" means, for a NOx budget unit, the tonnage
7 equivalent of the NOx allowances available for compliance deduction for the unit and for
8 a control period under 401 KAR 51:160 adjusted by deductions of sufficient NOx
9 allowances to account for:
- 10 (a) Actual utilization under 40 C.F.R. 96.42(e) for the control period;
- 11 (b) Excess NOx emissions for a prior control period under 40 C.F.R. 96.54(d);
- 12 (c) Withdrawal from the NOx budget program under 40 C.F.R. 96.86; or
- 13 (d) A change in regulatory status for a NOx budget opt-in source under 40 C.F.R.
14 96.87.
- 15 (156) "NOx budget opt-in source" means an affected facility that has elected to
16 become a NOx budget unit under the NOx Budget Trading Program and whose NOx
17 budget opt-in permit has been issued and is in effect.
- 18 (157) "NOx budget source" is defined by 40 C.F.R. 96.2.
- 19 (158) "NOx Budget Trading Program" is defined by 40 C.F.R. 96.2.
- 20 (159) "NOx budget unit" means a unit that is subject to the NOx Budget Trading
21 Program emissions limitation under 401 KAR 51:160 or 40 C.F.R. 96.80.
- 22 (160) "NOx budget unit operator" means a person who operates, controls, or
23 supervises a NOx budget unit, a NOx budget source, or a unit for which an application

1 for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not denied or
2 withdrawn and includes a holding company, utility system, or plant manager of a NOx
3 budget unit or source.

4 (161) "NOx budget unit owner" means:

5 (a) A holder of a portion of the legal or equitable title in a NOx budget unit or in a
6 unit for which an application for a NOx budget opt-in permit under 401 KAR 51:195 is
7 submitted and not denied or withdrawn;

8 (b) A holder of a leasehold interest in a NOx budget unit or in a unit for which an
9 application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not
10 denied or withdrawn;

11 (c) A purchaser of power from a NOx budget unit or from a unit for which an
12 application for a NOx budget opt-in permit under 401 KAR 51:195 is submitted and not
13 denied or withdrawn under a life-of-the-unit, firm power contractual arrangement and
14 unless expressly provided for in a leasehold agreement, does not include a passive
15 lessor, or a person who has an equitable interest through the lessor, whose rental
16 payments are not based, either directly or indirectly, upon the revenues or income from
17 the NOx budget unit or the unit for which an application for a NOx budget opt-in permit
18 under 401 KAR 51:195 is submitted and not denied or withdrawn; or

19 (d) For any general account, a person who has an ownership interest with respect to
20 the NOx allowances held in the general account and who is subject to the binding
21 agreement for the NOx authorized account representative to represent that person's
22 ownership.

23 (162) "O₂" means oxygen.

1 (163) "O₃" means ozone.

2 (164) "Opacity" means the degree to which emissions reduce the transmission
3 of light and obscure the view of an object in the background. [is defined by 40
4 C.F.R. 60.2.]

5 (165) "Operating" means, for a NOx budget unit, having documented heat input for
6 more than 876 hours in the six (6) months immediately preceding the submission of an
7 application for an initial NOx budget permit.

8 (166) "Operator" means, for a NOx budget unit, any person who operates, controls,
9 or supervises a NOx budget unit, a NOx budget source, or unit for which an application
10 for a NOx budget opt-in permit is submitted and not denied or withdrawn, and includes
11 any holding company, utility system, or plant manager of the unit or source.

12 (167) "Opt-in" means to be elected to become a NOx budget unit under the NOx
13 Budget Trading Program through a final NOx budget opt-in permit.

14 (168) "Owner", for a NOx budget unit, is defined by 40 C.F.R. 96.2.

15 (169) "Owner or operator" means a person who owns, leases, operates,
16 controls, or supervises an affected facility or a source of which an affected
17 facility is a part. [is defined by 40 C.F.R. 60.2.]

18 (170) "oz" means ounce.

19 (171) "Ozone depleting potential" or "ODP", means pursuant to 40 C.F.R. Part 82,
20 Subpart A, Appendices A and B, the ratio of the total amount of ozone destroyed by a
21 fixed amount of an ozone depleting substance to the amount of ozone destroyed by the
22 same mass of trichlorofluoromethane (CFC-11) in which the ozone depleting potential of
23 CFC-11 is equal to one and zero tenths (1.0).

24 (172) "Ozone depleting substance" or "ODS" means any chemical compound

1 regulated under 40 C.F.R. Part 82 with decay products, after the photolysis of the ODS
2 by short-wave ultraviolet light, that are able to catalyze the destruction of stratospheric
3 ozone.

4 (173) "PAL effective date" means:

5 (a) The date of issuance of the PAL permit; or

6 (b) For an increased PAL, the date any emissions unit that is part of the PAL
7 major modification becomes operational and begins to emit the PAL pollutant. [is
8 defined by 40 C.F.R. 51.166(w)(2)(vi).]

9 (174) "PAL effective period" means the period beginning with the PAL effective
10 date and ending ten (10) years later. [is defined by 40 C.F.R. 51.166(w)(2)(vii).]

11 (175) "PAL major modification" means any physical change in or a change in the
12 method of operation of the PAL source that causes it to emit the PAL pollutant at
13 a level equal to or greater than the PAL. [is defined by 40 C.F.R. 51.166(w)(2)(viii).]

14 (176) "PAL permit" means the permit issued by the cabinet that establishes a
15 PAL for a major stationary source. [is defined by 40 C.F.R. 51.166(w)(2)(ix).]

16 (177) "PAL pollutant" means the pollutant for which a PAL is established at a
17 major stationary source. [is defined by 40 C.F.R. 51.166(w)(2)(x).]

18 (178) "Particulate matter" means a material, except uncombined water that
19 exists in a finely divided form as a liquid or solid measured by a U.S. EPA-
20 approved test method or a test method approved in the Kentucky SIP. [is defined
21 by 40 C.F.R. 60.2.]

22 (179) "Particulate matter emissions" means, except as used in 40 C.F.R. Part 60,
23 all finely divided solid or liquid material, other than uncombined water, emitted to

1 the ambient air as measured by applicable reference methods, or an equivalent or
2 alternative method specified in 40 C.F.R. Chapter I, or by a test method specified
3 in the Kentucky SIP. ~~[is defined by 40 C.F.R. 51.100(pp), except as used in 40~~
4 C.F.R. Part 60.]

5 (180) "Peak load" means the maximum instantaneous operating load.

6 (181) "Permitted capacity factor" means the annual permitted fuel use divided by the
7 manufacturer's specified maximum fuel consumption multiplied by 8,760 hours per year.

8 (182) "Person" is defined by KRS 224.01-010(17).

9 (183) "Plant-wide applicability limitation" or "PAL" means an emission limitation,
10 expressed in tons per year, for a pollutant at a major stationary source, that is
11 enforceable as a practical matter and is established source-wide in accordance with 401
12 KAR 51:017 or 51:052.

13 (184) "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or
14 equal to a nominal two and five-tenths (2.5) micrometers as measured by a reference
15 method in 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R.
16 Part 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.

17 (185) "PM₁₀" means particulate matter with an aerodynamic diameter less than
18 or equal to a nominal ten (10) micrometers as measured by a reference method in
19 40 C.F.R. Part 50, Appendix J, and designated in accordance with 40 C.F.R. Part
20 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.
21 ~~[is defined by 40 C.F.R. 51.100(qq).]~~

22 (186) "PM₁₀ emissions" means finely divided solid or liquid material with an
23 aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to

1 the ambient air as measured by an applicable reference method, or an equivalent or
2 alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the
3 Kentucky SIP.

4 (187) "Pollution prevention" is defined by 40 C.F.R. 51.166(b)(38).

5 (188) "Portland cement" means a hydraulic cement produced by pulverizing clinker
6 consisting essentially of hydraulic calcium silicates.

7 (189) "Portland cement kiln" means a system, including solid, gaseous or liquid fuel
8 combustion equipment, used to calcine and fuse raw materials, including limestone and
9 clay, to produce Portland cement clinker.

10 (190) "Potential to emit" or "PTE" means:

11 (a) The maximum capacity of a stationary source to emit a pollutant under its
12 physical and operational design, in which:

13 1. A physical or operational limitation on the capacity of a source to emit an
14 air pollutant, including air pollution control equipment and restrictions on hours
15 of operation or on the type or amount of material combusted, stored, or
16 processed, is treated as part of its design if the limitation is enforceable as a
17 practical matter; and

18 2. This definition does not alter or affect the use of this term for other
19 purposes of the Clean Air Act, 42 U.S.C. 7401-7671q, or the term "capacity factor"
20 as used in the Acid Rain Program.

21 (b) For the PSD and NSR programs, the maximum capacity of a stationary
22 source to emit a pollutant under its physical or operational design, in which:

23 1. A physical or operational limitation on the capacity of the source to emit a

pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, is treated as part of its design if the limitation or the effect it would have on emissions:

a. Is federally enforceable; or

b. For an actuals PAL, is federally enforceable or enforceable as a practical matter; and

2. Secondary emissions are not counted. [(a) Means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design, in which:

1. A physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, is treated as part of its design if the limitation is enforceable as a practical matter; and

2. This definition does not alter or affect the use of this term for other purposes of the Clean Air Act, 42 U.S.C. 7401-7671g, or the term "capacity factor" as used in the Acid Rain Program;

(b) Is defined by 40 C.F.R. 51.166(b)(4) for 401 KAR 51:017; or

(c) Is defined by 40 C.F.R. 51.165(a)(1)(iii) for 401 KAR 51:052.]

(191) "ppb" means parts per billion.

(192) "ppm" means parts per million.

(193) "ppm(w/w)" means parts per million (weight by weight).

1 (194) "Precalciner kiln" means a kiln in which the feed to the kiln system is
2 preheated in cyclone chambers and utilizes a second burner to calcine material in a
3 separate vessel attached to the preheater prior to the final fusion in a kiln that forms
4 clinker.

5 (195) "Predictive emissions monitoring system" or "PEMS" is defined by 40 C.F.R.
6 51.166(b)(44).

7 (196) "Preheater kiln" means a kiln in which the feed to the kiln system is preheated
8 in cyclone chambers prior to the final fusion in a kiln that forms clinker.

9 (197) "Prevention of Significant Deterioration Program" or "PSD Program" means a
10 major source preconstruction program that has been approved by the U.S. EPA
11 and incorporated into the Kentucky SIP to implement the requirements of 40
12 C.F.R. 51.166 or 52.21. [is defined by 40 C.F.R. 51.166(b)(42).]

13 (198) "Project" means a physical change in or change in method of operation of
14 an existing major stationary source. [is defined by 40 C.F.R. 51.166(b)(51).]

15 (199) "Projected actual emissions" means:

16 (a) The maximum annual rate, in tons per year, at which an existing emissions
17 unit is projected to emit a regulated NSR pollutant in any one (1) of the five (5)
18 years, in a twelve (12) month period, following the date the unit resumes regular
19 operation after the project, or in any one (1) of the ten (10) years following that
20 date, if:

21 1. The project involves increasing the emissions unit's design capacity or its
22 potential to emit the regulated NSR pollutant; and

23 2. Full utilization of the unit would result in a significant emissions increase or

1 a significant net emissions increase at the major stationary source; or

2 (b) The maximum annual rate, in tons per year, at which an emissions unit,
3 before beginning actual construction, is projected to emit a regulated NSR
4 pollutant, if the source:

5 1.a. Considers all relevant information, including historical operational data
6 and the company's own representations of expected and highest projected
7 business activity, filings with the cabinet and the U.S. EPA, and compliance plans
8 under the Kentucky SIP;

9 b. Includes fugitive emissions and emissions associated with startups,
10 shutdowns, and malfunctions; and

11 c. Excludes, in calculating any increase in emissions that results from a
12 project, that portion of the unit's emissions following the project that an existing
13 unit could have accommodated during the consecutive twenty-four (24) month
14 period used to establish the baseline actual emissions and that are also unrelated
15 to the project, including any increased utilization due to product demand growth;
16 or

17 2. Elects to use the emissions unit's potential to emit, in tons per year, instead
18 of using subparagraph 1 of this paragraph to determine projected actual
19 emissions. [is defined by 40 C.F.R 51.166(b)(40).]

20 (200) "psia" means pounds per square inch absolute.

21 (201) "psig" means pounds per square inch gage.

22 (202) "RACT/BACT/LAER Clearinghouse" or "RBLC" means the U.S. EPA's online
23 collection of previous RACT/BACT/LAER determinations.

1 (203) "Reactivation of a very clean coal-fired EUSGU" is defined by 40 C.F.R.
2 51.166(b)(37).

3 (204) "Reasonable further progress" is defined by 42 U.S.C. 7501(1). For purposes
4 of this definition, "administrator" means the U.S. EPA.

5 (205) "Reconstruction" means the replacement of components of an existing
6 affected facility to the extent that:

7 (a) The fixed capital cost of the new components exceeds fifty (50) percent of the
8 fixed capital cost that would be required to construct a comparable entirely new affected
9 facility; and

10 (b) It is technologically and economically feasible to meet the applicable
11 requirements of 401 KAR Chapters 50 to 65.

12 (206) "Reference method" means a method of sampling and analyzing for an air
13 pollutant as published in 40 C.F.R. Part 50, Appendices A to N; 40 C.F.R. Part 53; 40
14 C.F.R. Part 60, Appendices A and B; 40 C.F.R. Part 61, Appendix B; or 40 C.F.R. Part
15 63, Appendices A to D.

16 (207) "Regulated NSR pollutant" means the following:

17 (a) A pollutant for which a national ambient air quality standard has been
18 promulgated and any constituents or precursors for such pollutants identified by
19 the U.S. EPA;

20 (b) A pollutant subject to any standard promulgated under 42 U.S.C. 7411;

21 (c) A pollutant subject to a standard promulgated under or established by 42
22 U.S.C. 7671 to 7671q; or

23 (d) A pollutant that otherwise is subject to regulation, as defined in subsection

1 (231) of this section, under 42 U.S.C. 7401 to 7671g, except that any hazardous air
2 pollutant (HAP) listed in 42 U.S.C. 7412 or added to the list pursuant to 42 U.S.C.
3 7412(b)(2), that has not been delisted pursuant to 42 U.S.C. 7412(b)(3), is not a
4 regulated NSR pollutant unless the listed HAP is also regulated as a constituent
5 or precursor of a general pollutant listed under 42 U.S.C. 7408. [is defined by 40
6 C.F.R. 51.166(b)(49).]

7 (208) "Replacement unit" means an emissions unit that does not generate
8 creditable emissions reductions by shutting down the existing emissions unit
9 that is replaced, and that:

10 (a)1. Is a reconstructed unit within the meaning of 40 C.F.R. 60.15(b)(1) or that
11 completely takes the place of an existing emissions unit;

12 2. Is identical to or functionally equivalent to the replaced emissions unit; and

13 3. Does not alter the basic design parameters of the process unit.

14 (b) Replaces a unit that:

15 1. Is permanently removed from the major stationary source, is otherwise
16 permanently disabled, or is prohibited from operating by a permit that is
17 enforceable as a practical matter; and

18 2. If brought back into operation, is considered a new emissions unit. [is
19 defined by 40 C.F.R. 51.166(b)(32).]

20 (209) "Repowering" is defined by 40 C.F.R. 51.166(b)(36). [For purposes of this
21 definition, "administrator" means the U.S. EPA.]

22 (210) "Responsible official" means:

23 (a) For a corporation: a president, secretary, treasurer, or vice-president of the

corporation in charge of a principal business function, or other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of that person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit; and

1. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25,000,000 in second quarter 1980 dollars; or

2. The delegation of authority to the representative is approved in advance by the cabinet pursuant to this subsection;

(b) For a partnership or sole proprietorship, a general partner or the proprietor, respectively;

(c) For a municipality, state, federal, or other public agency, a principal executive officer or ranking elected official. The principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operation of a principal geographic unit of the agency; or

(d) For the acid rain portion of a permit for an affected source, the designated representative. [is defined by 40 C.F.R. 70.2.]

(211) "Run" means the net period of time, either intermittent or continuous within the limits of good engineering practice, when an emission sample is collected. [is defined by 40 C.F.R. 60.2.]

(212) "S" means at standard conditions.

(213) "sec" means second.

(214) "Secondary emissions" means emissions that:

1 (a) Occur as a result of the construction or operation of a major stationary
2 source or major modification, and do not come from the major stationary source
3 or major modification itself;

4 (b) Are specific, well defined, quantifiable, and impact the same general area
5 as the stationary source modification that causes the secondary emissions;

6 (c) Include emissions from an offsite support facility that would not otherwise
7 be constructed or increase its emissions as a result of the construction or
8 operation of the major stationary source or major modification; and

9 (d) Do not include emissions that come directly from a mobile source,
10 including emissions from the tailpipe of a motor vehicle, a train, or vessel. [is
11 defined by 40 C.F.R. 51.166(b)(18).]

12 (215) "Serious nonattainment county" or "serious nonattainment area" means a
13 county or portion of a county designated serious nonattainment for the national ambient
14 air quality standard for ozone.

15 (216) "Severe nonattainment county" or "severe nonattainment area" means a
16 county or portion of a county designated severe nonattainment for the national ambient
17 air quality standard for ozone.

18 (217) "Shutdown" means the cessation of an operation.

19 (218) "Significant" means:

20 (a) For 401 KAR 51:017, in reference to a net emissions increase or the
21 potential of a source to emit any of the pollutants listed in the following table, a
22 rate of emissions that would equal or exceed a corresponding rate listed in the
23 table:

<u>POLLUTANT</u>	<u>EMISSIONS</u> <u>RATE</u>
<u>Carbon monoxide</u>	<u>100 tons per</u> <u>year (tpy)</u>
<u>Ozone depleting</u> <u>substance</u>	<u>100 tpy</u>
<u>Nitrogen oxides</u>	<u>40 tpy</u>
<u>Sulfur dioxide</u>	<u>40 tpy</u>
<u>Particulate matter</u>	<u>25 tpy of</u> <u>particulate</u> <u>matter</u> <u>emissions</u>
	<u>15 tpy of PM₁₀</u> <u>emissions</u>
<u>Ozone</u>	<u>40 tpy of volatile</u> <u>organic</u> <u>compounds or</u> <u>nitrogen oxides</u>
<u>Lead</u>	<u>0.6 tpy</u>
<u>Fluorides</u>	<u>3 tpy</u>
<u>Sulfuric acid mist</u>	<u>7 tpy</u>
<u>Hydrogen sulfide</u> <u>(H₂S)</u>	<u>10 tpy</u>

<u>Total reduced sulfur</u> <u>(including H₂S)</u>	<u>10 tpy</u>
<u>Reduced sulfur</u> <u>compounds</u> <u>(including H₂S)</u>	<u>10 tpy</u>
<u>Municipal waste</u> <u>combustor organics</u> <u>(measured as total</u> <u>tetra- through octa-</u> <u>chlorinated dibenzo-</u> <u>p-dioxins and</u> <u>dibenzofurans)</u>	<u>3.2 x 10⁻⁶</u> <u>megagrams per</u> <u>year (Mg/y) (3.5 x</u> <u>10⁻⁶ tpy)</u>
<u>Municipal waste</u> <u>combustor metals</u> <u>(measured as</u> <u>particulate matter)</u>	<u>14 Mg/y (15 tpy)</u>
<u>Municipal waste</u> <u>combustor acid</u> <u>gases (measured as</u> <u>sulfur dioxide and</u> <u>hydrogen chloride)</u>	<u>36 Mg/y (40 tpy)</u>

<u>Municipal solid waste</u>	<u>35 Mg/y (50 tpy)</u>
<u>landfill emissions</u>	
<u>(measured as</u>	
<u>nonmethane organic</u>	
<u>compounds)</u>	

(b) For 401 KAR 51:017, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that is not listed in the table in paragraph (a) of this subsection, any emissions rate:

(c) For 401 KAR 51:017, in reference to an emissions rate or a net emissions increase associated with a major stationary source or major modification, that is to be constructed within ten (10) kilometers of a Class I area, an impact on that area equal to or greater than one (1) $\mu\text{g}/\text{m}^3$ over a twenty-four (24) hour average:

(d) For 401 KAR 51:052, in reference to a net emissions increase or the potential of a source to emit any of the pollutants listed in the following table, a rate of emissions that would equal or exceed a corresponding rate listed in the table:

<u>POLLUTANT</u>	<u>EMISSIONS RATE</u>
<u>Carbon</u>	<u>100 tons per year</u>
<u>monoxide</u>	<u>(tpy)</u>
<u>Ozone depleting</u>	<u>100 tpy</u>
<u>substance</u>	
<u>Nitrogen oxides</u>	<u>40 tpy</u>
<u>Sulfur dioxide</u>	<u>40 tpy</u>

<u>Ozone</u>	<u>40 tpy of volatile organic compounds or nitrogen oxides</u>
<u>Lead</u>	<u>0.6 tpy</u>

(e) For 401 KAR 51:052, with the exception of the significant emissions rate for ozone in this subsection, significant means, in reference to an emissions increase or net emissions increase, a rate of emissions that exceeds the following:

1. Twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides in a serious or severe ozone nonattainment area; or

2. Any increase in actual emissions of volatile organic compounds or nitrogen oxides in an extreme ozone nonattainment area; or

(f) For 401 KAR 51:052, with the exception of the significant emissions rate for carbon monoxide in this subsection, significant means, in reference to an emissions increase or net emissions increase, a rate of emissions of carbon monoxide that equals or exceeds fifty (50) tons per year in a serious nonattainment area for carbon monoxide in which a stationary source contributes significantly to carbon monoxide levels. [is defined by:

(a) 40 C.F.R. 51.166(b)(23) for 401 KAR 51:017; or

(b) 40 C.F.R. 51.165(a)(1)(x) for 401 KAR 51:052.]

(219) "Significant emissions increase" means, for a regulated NSR pollutant, an increase in emissions that is equal to or greater than the emission level that is significant for that pollutant. [is defined by:

1 ~~(a) 40 C.F.R. 51.166(b)(39) for 401 KAR 51:017; or~~

2 ~~(b) 40 C.F.R. 51.165(a)(1)(xxvii) for 401 KAR 51:052.]~~

3 (220) "Significant emissions unit" means an emissions unit that emits or has the
4 potential to emit a PAL pollutant in an amount equal to or greater than the
5 applicable significant level as defined in subsection (218) of this section or in 42
6 U.S.C. 7401 to 7671g, whichever is lower for that PAL pollutant, but less than the
7 amount that would qualify the unit as a major emissions unit. [is defined by:

8 ~~(a) 40 C.F.R. 51.166(w)(2)(xi) for 401 KAR 51:017; or~~

9 ~~(b) 40 C.F.R. 51.165(f)(2)(xi) for 401 KAR 51:052.]~~

10 (221) "Small emissions unit" means an emissions unit that emits or has the
11 potential to emit the PAL pollutant in an amount less than the PAL pollutant's
12 applicable significant level as defined in subsection (218) of this section; or in 42
13 U.S.C. 7401 to 7671g, whichever is lower. [is defined by:

14 ~~(a) 40 C.F.R. 51.166(w)(2)(iii) for 401 KAR 51:017; or~~

15 ~~(b) 40 C.F.R. 51.165(f)(2)(iii) for 401 KAR 51:052.]~~

16 (222) "SO₂" means sulfur dioxide.

17 (223) "Source" means one (1) or more affected facilities contained within a given
18 contiguous property line, which means the property is separated only by a public
19 thoroughfare, stream, or other right of way.

20 (224) "sq" means square.

21 (225) "Stack or chimney" means a flue, conduit, or duct arranged to conduct
22 emissions to the atmosphere.

23 (226) "Standard" means an emission standard, a standard of performance, or an

1 ambient air quality standard as promulgated in 401 KAR Chapters 50 to 65 or the
2 emission control requirements necessary to comply with 401 KAR Chapter 51.

3 (227) "Standard conditions" means:

4 (a) For source measurements, twenty (20) degrees Celsius (sixty-eight (68) degrees
5 Fahrenheit) and a pressure of 760 mm Hg (29.92 in. of Hg); or [.]

6 (b) For air quality determinations, twenty-five (25) degrees Celsius (seventy-seven
7 (77) degrees Fahrenheit) and a reference pressure of 760 mm Hg (29.92 in. of Hg).

8 (228) "Start-up" or "startup" means the setting in operation of an affected facility.

9 (229) "State implementation plan" or "SIP" means the most recently prepared plan
10 or revision required by 42 U.S.C. 7410 that has been approved by the U.S. EPA.

11 (230) "Stationary source" means a building, structure, facility, or installation
12 that emits or has the potential to emit a regulated NSR pollutant. [is defined by 40
13 C.F.R. 51.166(b)(5).]

14 (231) "Subject to regulation" is defined by 40 C.F.R. 51.166(b)(48) [for the PSD
15 and NSR programs.].

16 (232) "Submit" means to send or transmit a document, information, or
17 correspondence in accordance with an applicable requirement.

18 (233) "TAPPI" means Technical Association of the Pulp and Paper Industry.

19 (234) "Temporary clean coal technology demonstration project" is defined by 40
20 C.F.R. 51.166(b)(35).

21 (235) "Ton" or "tonnage", for a NOx budget source, means a short ton or 2,000
22 pounds. For determining compliance with the NOx budget emissions limitation,
23 total tons for a control period is calculated as the sum of all recorded hourly

emissions, or the tonnage equivalent of the recorded hourly emissions rates, in accordance with 40 C.F.R. Part 96, Subpart H with any remaining fraction of a ton equal to or greater than 0.50 ton deemed to equal one (1) ton and any fraction of a ton less than 0.50 ton deemed to equal zero tons. [is defined by 40 C.F.R. 96.2.]

(236) "Total suspended particulates" or "TSP" means particulate matter as measured by the method described in 40 C.F.R. Part 50, Appendix B. [is defined by 40 C.F.R. 51.100(ss).]

(237) "tpy" means tons per year.

(238) "TSS" means total suspended solids.

(239) "Uncombined water" means water that can be separated from a compound by ordinary physical means and that is not bound to a compound by internal molecular forces.

(240) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system. [is defined by 40 C.F.R. 96.2.]

(241) "Urban county" means a county that is a part of an urbanized area with a population greater than 200,000 based upon the 1980 census. If a portion of a county is a part of an urbanized area, then the entire county is classified as urban for 401 KAR Chapters 50 to 65.

(242) "Urbanized area" means an area defined by the U.S. Department of Commerce, Bureau of Census.

(243) "U.S. EPA" means the United States Environmental Protection Agency.

(244) "UTM" means Universal Transverse Mercator.

(245) "Visibility impairment" is defined by 40 C.F.R. 51.301.

1 (246) "Volatile organic compound" or "VOC" is defined by 40 C.F.R. 51.100(s).

2 (247) "yd" means yard.

3 ~~[Section 1. Definitions. (1) "Acid rain emissions limitation" means a limitation on~~
4 ~~emissions of SO₂ or NO_x imposed by the Acid Rain Program under 42 U.S.C. 7651 to~~
5 ~~7651e.~~

6 ~~— (2) "Actual emissions" means the actual rate of emissions of a regulated NSR~~
7 ~~pollutant from an emissions unit, as determined according to the following:~~

8 ~~— (a) Actual emissions as of a particular date equals the average rate, in tons per~~
9 ~~year, at which the unit actually emitted the pollutant during a consecutive twenty four~~
10 ~~(24) month period, that precedes that date and is representative of normal source~~
11 ~~operation.~~

12 ~~— 1. Use of a different time period is allowed if the cabinet determines that a different~~
13 ~~time period is more representative of normal source operation; and~~

14 ~~— 2. The unit's actual operating hours, production rates, and types of materials~~
15 ~~processed, stored, or combusted during the selected time periods are used to calculate~~
16 ~~actual emissions.~~

17 ~~— (b) Source specific allowable emissions for the unit are equivalent to actual~~
18 ~~emissions of the unit if the cabinet has made an equivalency determination pursuant to~~
19 ~~40 C.F.R. 51.166.~~

20 ~~— (c) For an emissions unit, that has not begun normal operations on the particular~~
21 ~~date, actual emissions equals the potential to emit of the unit on that date.~~

22 ~~(d) This definition does not include:~~

23 ~~— 1. Calculating if a significant emissions increase has occurred; or~~

- 1 ~~2. Establishing a PAL under 401 KAR 51:017, Section 20.~~
- 2 ~~(3) "Actuals PAL" or "PAL" means a plant wide applicability limit established for a~~
3 ~~major stationary source based on the baseline actual emissions of all emissions units at~~
4 ~~the source that emit or have the potential to emit the PAL pollutant.~~
- 5 ~~(4) "Adverse impact on visibility" means visibility impairment that interferes with the~~
6 ~~management, protection, preservation, or enjoyment of the visitor's visual experience of~~
7 ~~the Class I area. This determination:~~
- 8 ~~(a) Is to be made on a case by case basis;~~
- 9 ~~(b) Considers the geographic extent, intensity, duration, frequency and time of~~
10 ~~visibility impairment, and how these factors correlate with the times of visitor use of the~~
11 ~~Class I area; and~~
- 12 ~~(c) Considers the frequency and timing of natural conditions that reduce visibility.~~
- 13 ~~(5) "Affected facility" means an apparatus, building, operation, road, or other entity~~
14 ~~or series of entities that emits or may emit an air contaminant into the outdoor~~
15 ~~atmosphere.~~
- 16 ~~(6) "Air contaminant" is defined by KRS 224.01-010(1).~~
- 17 ~~(7) "Air pollutant" means air contaminant.~~
- 18 ~~(8) "Air pollution" is defined by KRS 224.01-010(3).~~
- 19 ~~(9) "Air pollution control equipment" means a mechanism, device, or contrivance~~
20 ~~used to control or prevent air pollution, that is not, aside from air pollution control laws~~
21 ~~and administrative regulations, vital to production of the normal product of the source or~~
22 ~~to its normal operation.~~
- 23 ~~(10) "Allocate" or "allocation" means the determination by the cabinet of the number~~

1 ~~of NOx allowances to be credited to a NOx budget unit.~~

2 ~~—(11) "Allocation period" means each three (3) year period beginning May 1, 2004.~~

3 ~~—(12) "Allowable emissions" means:~~

4 ~~—(a) The emissions rate of a stationary source calculated using the maximum rated~~
5 ~~capacity of the source, unless the source is subject to federally enforceable limits that~~
6 ~~restrict the operating rate, or hours of operation, or both, and the most stringent of the~~
7 ~~following:~~

8 ~~— 1. The applicable standards codified in 40 C.F.R. Parts 60 and 61;~~

9 ~~— 2. The applicable SIP emissions limitations, including those with a future compliance~~
10 ~~date; or~~

11 ~~— 3. The emissions rates specified as a federally enforceable permit condition,~~
12 ~~including those with a future compliance date; or~~

13 ~~—(b) For an actuals PAL, the emissions rate of a stationary source calculated~~
14 ~~considering any emission limitations that are enforceable as a practical matter on the~~
15 ~~emissions unit's potential to emit, and the most stringent provision of paragraph (a)1 to~~
16 ~~3 of this subsection.~~

17 ~~—(13) "Alteration" means:~~

18 ~~—(a) The installation or replacement of air pollution control equipment at a source; or~~

19 ~~—(b) A physical change in or change in the method of operation of an affected facility~~
20 ~~that increases the potential to emit a pollutant, to which a standard applies, emitted by~~
21 ~~the facility or that results in the emission of an air pollutant, to which a standard applies,~~
22 ~~not previously emitted.~~

23 ~~—(14) "Alternative method" is defined by 40 C.F.R. 60.2. For purposes of this~~

1 definition, "administrator" means both U.S. EPA and the cabinet.

2 ~~— (15) "Ambient air" means that portion of the atmosphere, external to buildings, to~~
3 ~~which the general public has access.~~

4 ~~— (16) "Ambient air quality standard" means a numerical expression of a specified~~
5 ~~concentration level for a particular air contaminant and the time averaging interval over~~
6 ~~which that concentration level is measured and is a goal to be achieved in a stated time~~
7 ~~through the application of appropriate preventive or control measures.~~

8 ~~— (17) "ANSI" means American National Standards Institute.~~

9 ~~— (18) "AOAC" means Association of Official Analytical Chemists.~~

10 ~~— (19) "ASTM" means American Society for Testing and Materials.~~

11 ~~— (20) "Baseline actual emissions" means the rate of emissions, in tons per year, of a~~
12 ~~regulated NSR pollutant, that:~~

13 ~~— (a) For an existing electric utility steam generating unit (EUSGU), the unit actually~~
14 ~~emitted during any consecutive twenty-four (24) month period selected by the owner or~~
15 ~~operator within the five (5) year period immediately preceding the date the owner or~~
16 ~~operator begins actual construction of the project.~~

17 ~~— 1. The rate is an average that:~~

18 ~~— a. Includes fugitive emissions, to the extent quantifiable, and emissions associated~~
19 ~~with startups, shutdowns, and malfunctions;~~

20 ~~— b. Is adjusted downward to exclude any noncompliant emissions that occurred while~~
21 ~~the source was operating above an emission limitation that was legally enforceable~~
22 ~~during the consecutive twenty four (24) month period; and~~

23 ~~— c. Is based on any consecutive twenty four (24) month period for which there is~~

1 ~~adequate information for determining annual emissions, in tons per year, and for~~
2 ~~adjusting this amount as necessary according to clause b of this subparagraph;~~
3 ~~— 2. Use of a cabinet-approved time period other than the twenty-four (24) month~~
4 ~~period is allowed, if a different time period is more representative of normal source~~
5 ~~operation; and~~
6 ~~— 3. If a project involves multiple emissions units, only one (1) consecutive twenty-four~~
7 ~~(24) month period is used to determine the baseline actual emissions for the emissions~~
8 ~~units being changed with a different consecutive twenty-four (24) month period allowed~~
9 ~~for each regulated NSR pollutant.~~
10 ~~— (b) For an existing emissions unit that is not an EUSGU, the unit actually emitted~~
11 ~~during any consecutive twenty-four (24) month period selected by the owner or operator~~
12 ~~within the ten (10) year period beginning on or after November 15, 1990, and~~
13 ~~immediately preceding the earlier of the date the owner or operator begins actual~~
14 ~~construction of the project or the date a complete permit application is received by the~~
15 ~~cabinet for a permit required under 401 KAR 51:017 or 51:052.~~
16 ~~— 1. The rate is an average that:~~
17 ~~— a. Includes fugitive emissions, to the extent quantifiable, and emissions associated~~
18 ~~with startups, shutdowns, and malfunctions;~~
19 ~~— b. Is adjusted downward:~~
20 ~~— (i) To exclude any noncompliant emissions that occurred while the source was~~
21 ~~operating above an emission limitation that was legally enforceable during the~~
22 ~~consecutive twenty-four (24) month period;~~
23 ~~— (ii) To exclude any emissions that would have exceeded an emission limitation with~~

1 ~~which the major stationary source is required currently to comply, if the source had been~~
2 ~~required to comply with the limitations during the consecutive twenty four (24) month~~
3 ~~period; and~~

4 ~~— (iii) For an emission limitation that is part of a maximum achievable control~~
5 ~~technology standard proposed or promulgated under 40 C.F.R. Part 63, only if the~~
6 ~~Commonwealth of Kentucky has taken credit for the emissions reductions in an~~
7 ~~attainment demonstration or maintenance plan consistent with 40 C.F.R.~~
8 ~~51.165(a)(3)(ii)(G); and~~

9 ~~— c. Is based on any consecutive twenty four (24) month period for which there is~~
10 ~~adequate information for determining annual emissions, in tons per year, and for~~
11 ~~adjusting this amount as necessary according to clause b of this subparagraph; and~~

12 ~~— 2. If a project involves multiple emissions units, only one (1) consecutive twenty four~~
13 ~~(24) month period is used to determine the baseline actual emissions for the emissions~~
14 ~~units being changed with a different consecutive twenty four (24) month period is~~
15 ~~allowed for each regulated NSR pollutant.~~

16 ~~— (e) For a new emissions unit, equals zero for determining the emissions increase~~
17 ~~that will result from the initial construction and operation of the new unit and thereafter,~~
18 ~~for all other purposes, equals the unit's potential to emit.~~

19 ~~— (d) For a PAL for a stationary source, is determined as follows:~~

20 ~~— 1. For an existing EUSGU, in accordance with the procedures contained in~~
21 ~~paragraph (a) of this subsection;~~

22 ~~— 2. For other existing emissions units, in accordance with the procedures contained~~
23 ~~in paragraph (b) of this subsection; and~~

1 ~~3. For a new emissions unit, in accordance with the procedures contained in~~
2 ~~paragraph (c) of this subsection.~~

3 ~~(21) "Baseline area" means an intrastate area, and every part of that area,~~
4 ~~designated as attainment or unclassifiable pursuant to 42 U.S.C. 7407 (d)(1)(A)(ii) or (iii)~~
5 ~~in which the major source or major modification establishing the minor source baseline~~
6 ~~date would construct or would have an air quality impact equal to or greater than one (1)~~
7 ~~$\mu\text{g}/\text{m}^3$ annual average of the pollutant for which the minor source baseline date is~~
8 ~~established.~~

9 ~~(a) Area redesignations under 42 U.S.C. 7407(d)(1)(A)(ii) or (iii) cannot intersect or~~
10 ~~be smaller than the area of impact of a major stationary source or major modification~~
11 ~~that:~~

12 ~~1. Establishes a minor source baseline date; or~~

13 ~~2. Is subject to 401 KAR 51:017 and would be constructed in the Commonwealth of~~
14 ~~Kentucky.~~

15 ~~(b) A baseline area established originally for total suspended particulate (TSP)~~
16 ~~increments remains in effect to determine the amount of available PM_{10} increments,~~
17 ~~unless the cabinet rescinds the corresponding minor source baseline date.~~

18 ~~(22) "Baseline concentration" means the ambient concentration level that exists in~~
19 ~~the baseline area on the date the applicable minor source baseline date is established.~~

20 ~~(a) A baseline concentration is determined for each pollutant for which a minor~~
21 ~~source baseline date is established and includes:~~

22 ~~1. The actual emissions representative of sources in existence on the applicable~~
23 ~~minor source baseline date, except as provided in paragraph (b) of this subsection; and~~

1 ~~2. The allowable emissions of major stationary sources that commenced~~
2 ~~construction before the major source baseline date but were not in operation by the~~
3 ~~applicable minor source baseline date.~~

4 ~~(b) The following are not included in the baseline concentration and thus affect the~~
5 ~~maximum applicable allowable increase:~~

6 ~~1. Actual emissions at a major source, that result from construction commencing~~
7 ~~after the major source baseline date; and~~

8 ~~2. Actual emissions increases and decreases at a stationary source occurring after~~
9 ~~the minor source baseline date.~~

10 ~~(23) "Baseline date" means major source baseline date or minor source baseline~~
11 ~~date and is established for each pollutant for which increments or other equivalent~~
12 ~~measures have been established if the area in which the proposed source or~~
13 ~~modification would construct is designated as attainment or unclassifiable pursuant to~~
14 ~~42 U.S.C. 7407(d)(1)(A)(ii) or (iii) for the pollutant on the date of the source's complete~~
15 ~~application; and~~

16 ~~(a) For a major stationary source, the pollutant would be emitted in significant~~
17 ~~amounts; or~~

18 ~~(b) For a major modification, there would be a significant net emissions increase of~~
19 ~~the pollutant.~~

20 ~~(24) "Begin actual construction" means:~~

21 ~~(a) Initiation of physical on-site construction activities on an emissions unit that are~~
22 ~~of a permanent nature and include installation of building supports and foundations,~~
23 ~~laying underground pipe work, and construction of permanent storage structures.~~

~~(b) For a change in method of operations, those on-site activities, other than the preparatory activities, that mark the initiation of the change.~~

~~(25) "Best available control technology" or "BACT" means an emissions limitation, including a visible emission standard, based on the maximum degree of reduction for each regulated NSR pollutant that will be emitted from a proposed major stationary source or major modification that:~~

~~(a) Is determined by the cabinet on a case by case basis pursuant to 40 C.F.R. 51.166(b)(12) after taking into account energy, environmental, and economic impacts and other costs, to be achievable by the source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of that pollutant;~~

~~(b) Does not result in emissions of a pollutant that would exceed the emissions allowed by an applicable standard codified in 40 C.F.R. Parts 60 and 61; and~~

~~(c) Is satisfied by a design, equipment, work practice, or operational standard or combination of standards approved by the cabinet, if:~~

~~1. The cabinet determines technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible;~~

~~2. The standard establishes the emissions reduction achievable by implementation of the design, equipment, work practice, or operation; and~~

~~3. The standard provides for compliance by means that achieve equivalent results.~~

~~(26) "BOD" means biochemical oxidant demand.~~

- 1 ~~— (27) "Boiler" means an enclosed fossil or other fuel-fired combustion device used to~~
2 ~~produce heat and to transfer heat to recirculating water, steam, or other medium.~~
- 3 ~~— (28) "BTU" means British thermal unit.~~
- 4 ~~— (29) "Building, structure, facility, or installation" means all of the pollutant emitting~~
5 ~~activities that:~~
- 6 ~~— (a) Belong to the same industrial grouping, or have the same two (2) digit major~~
7 ~~group code, as described in the Standard Industrial Classification Manual;~~
- 8 ~~— (b) Are located on one (1) or more contiguous or adjacent properties;~~
- 9 ~~— (c) Are under the control of the same person or persons under common control; and~~
- 10 ~~— (d) Do not include the activities of a vessel.~~
- 11 ~~— (30) "C" means degree Celsius (centigrade).~~
- 12 ~~— (31) "Cabinet" is defined by KRS 224.01-010(9).~~
- 13 ~~— (32) "Cal" means calorie.~~
- 14 ~~— (33) "Capital expenditure" is defined in 40 C.F.R. 60.2.~~
- 15 ~~— (34) "cfm" means cubic feet per minute.~~
- 16 ~~— (35) "CH₄" means methane.~~
- 17 ~~— (36) "Clean coal technology" means a technology, including technologies applied at~~
18 ~~the precombustion, combustion, or postcombustion stage, at a new or existing facility~~
19 ~~that will achieve significant reductions in air emissions of sulfur dioxide or oxides of~~
20 ~~nitrogen associated with the utilization of coal in the generation of electricity or process~~
21 ~~steam that was not in widespread use as of November 15, 1990.~~
- 22 ~~— (37) "Clean coal technology demonstration project" means a commercial~~
23 ~~demonstration of clean coal technology, with a federal contribution of at least twenty~~

- 1 ~~(20) percent of the total cost of the project and funding appropriated as follows:~~
- 2 ~~— (a) Under the heading "Department of Energy Clean Coal Technology," up to a total~~
- 3 ~~amount of \$2,500,000,000; or~~
- 4 ~~— (b) To the U.S. EPA for a similar project.~~
- 5 ~~— (38) "Clinker" means the product of a portland cement kiln from which finished~~
- 6 ~~cement is manufactured by milling and grinding.~~
- 7 ~~— (39) "CO" means carbon monoxide.~~
- 8 ~~— (40) "CO₂" means carbon dioxide.~~
- 9 ~~— (41) "COD" means chemical oxidant demand.~~
- 10 ~~— (42) "Combined cycle system" means a system comprised of one (1) or more~~
- 11 ~~combustion turbines, heat recovery steam generators, or steam turbines configured to~~
- 12 ~~improve overall efficiency of electricity generation or steam production.~~
- 13 ~~— (43) "Combustion turbine" means an enclosed fossil or other fuel-fired device that is~~
- 14 ~~comprised of a compressor, a combustor, and a turbine, and in which the flue gas~~
- 15 ~~resulting from the combustion of fuel in the combustor passes through the turbine,~~
- 16 ~~rotating the turbine.~~
- 17 ~~— (44) "Commence" means that an owner or operator:~~
- 18 ~~— (a) Has undertaken a continuous program of construction, modification, or~~
- 19 ~~reconstruction of an affected facility, or that an owner or operator has entered into a~~
- 20 ~~contractual obligation to undertake and complete, within a reasonable time, a~~
- 21 ~~continuous program of construction, modification, or reconstruction of an affected~~
- 22 ~~facility; or~~
- 23 ~~— (b) For construction of a major stationary source or major modification in the PSD or~~

1 NSR program, has all necessary preconstruction approvals or permits, and:

2 ~~— 1. Has begun, or caused to begin, a continuous program of actual on-site~~
3 ~~construction of the source, to be completed within a reasonable time; or~~

4 ~~— 2. Has entered into binding agreements or contractual obligations, that cannot be~~
5 ~~cancelled or modified without substantial loss to the owner or operator, to undertake a~~
6 ~~program of actual construction of the source to be completed within a reasonable time.~~

7 ~~— (45) "Commence commercial operation" means to have begun to produce steam,~~
8 ~~gas, or other heated medium used to generate electricity for sale or use. Except as~~
9 ~~provided in 401 KAR 51:195 or 40 C.F.R. 96.5:~~

10 ~~— (a) For a unit that is a NOx budget unit under 40 C.F.R. 96.4, on the date the unit~~
11 ~~commences commercial operation, the date remains the unit's date of commencement~~
12 ~~of commercial operation even if the unit is subsequently modified, reconstructed, or~~
13 ~~repowered.~~

14 ~~— (b) For a unit that is not a NOx budget unit under 40 C.F.R. 96.4, on the date the~~
15 ~~unit commences commercial operation, the date the unit becomes a NOx budget unit~~
16 ~~under 40 C.F.R. 96.4 is the unit's date of commencement of commercial operation.~~

17 ~~— (46) "Commence operation" means, for a NOx budget unit, to have begun a~~
18 ~~mechanical, chemical, or electronic process, including start up of a unit's combustion~~
19 ~~chamber. Except as provided in 401 KAR 51:195 or 40 C.F.R. 96.5:~~

20 ~~— (a) For a unit that is a NOx budget unit under 40 C.F.R. 96.4 on the date of~~
21 ~~commencement of operation, the date remains the unit's date of commencement of~~
22 ~~operation even if the unit is subsequently modified, reconstructed, or repowered.~~

23 ~~— (b) For a unit that is not a NOx budget unit under 40 C.F.R. 96.4 on the date of~~

1 commencement of operation, the date the unit becomes a NOx budget unit under 40
2 C.F.R. 96.4 is the unit's date of commencement of operation.

3 ~~— (47) "Complete" means, in reference to an application for a major NSR permit, that~~
4 ~~the application contains information necessary for processing the application.~~
5 ~~Designating an application complete for permit processing does not preclude the~~
6 ~~cabinet from requesting or accepting additional information.~~

7 ~~— (48) "Compliance schedule" means a time schedule of remedial measures including~~
8 ~~an enforceable sequence of actions or operations leading to compliance with a limitation~~
9 ~~or standard.~~

10 ~~— (49) "Compliance supplement pool" means the quantity of NOx allowances provided~~
11 ~~to Kentucky by the U.S. EPA to be:~~

12 ~~— (a) Allocated to NOx budget units that achieve early reduction; or~~
13 ~~— (b) Used to assist NOx budget sources that are unable to meet the compliance~~
14 ~~deadline as provided in 401 KAR 51:180, Section 5.~~

15 ~~— (50) "Construction" means:~~

16 ~~— (a) Fabrication, erection, installation, or modification of an air contaminant source; or~~
17 ~~— (b) For the NSR program, any physical change or change in the method of~~
18 ~~operation, including fabrication, erection, installation, demolition, or modification of an~~
19 ~~emissions unit that would result in a change in emissions at an air contaminant source.~~

20 ~~— (51) "Continuous emissions monitoring system" or "CEMS" means all of the~~
21 ~~equipment that may be required to meet the data acquisition and availability~~
22 ~~requirements of 401 KAR 51:017 or 51:052 to sample, condition (if applicable), analyze,~~
23 ~~and provide a record of emissions on a continuous basis.~~

1 ~~(52) "Continuous emissions monitoring system for NO_x" or "CEMS for NO_x" means~~
2 ~~the equipment required by 40 C.F.R. 96.70 to 96.76 to sample, analyze, measure, and~~
3 ~~provide, by readings taken at least once every fifteen (15) minutes of the measured~~
4 ~~parameters, a permanent record of NO_x emissions, expressed in tons per hour for NO_x.~~
5 ~~The following systems are necessary component parts, as required by 40 C.F.R. Part~~
6 ~~75, included in a continuous emissions monitoring system:~~
7 ~~(a) Flow monitor;~~
8 ~~(b) NO_x pollutant concentration monitor;~~
9 ~~(c) Diluent gas monitor (O₂ or CO₂) if required by 40 C.F.R. 96.70 to 96.76;~~
10 ~~(d) Continuous moisture monitor if required by 40 C.F.R. 96.70 to 96.76; and~~
11 ~~(e) Automated data acquisition and handling system.~~
12 ~~(53) "Continuous emissions rate monitoring system" or "CERMS" means the total~~
13 ~~equipment required for the determination and recording of the pollutant mass emissions~~
14 ~~rate in terms of mass per unit of time.~~
15 ~~(54) "Continuous monitoring system" means the total equipment, required under the~~
16 ~~applicable administrative regulations in 401 KAR Chapters 50 to 65, used to sample, to~~
17 ~~condition (if applicable), to analyze, and to provide a permanent record of emissions or~~
18 ~~process parameters.~~
19 ~~(55) "Continuous parameter monitoring system" or "CPMS" means all of the~~
20 ~~equipment necessary to meet the data acquisition and availability requirements of 401~~
21 ~~KAR 51:017 and 51:052 to:~~
22 ~~(a) Monitor process and control device operational parameters such as control~~
23 ~~device secondary voltages and electric currents;~~

1 ~~—(b) Monitor other information such as gas flow rate and ozone or carbon dioxide~~
2 ~~concentrations; and~~

3 ~~—(c) Record average operational parameter values on a continuous basis.~~

4 ~~—(56) "Control period" means:~~

5 ~~—(a) For the year 2004, the period beginning May 31, 2004, and ending September~~
6 ~~30, 2004, inclusive; and~~

7 ~~—(b) For all other years, the period beginning May 1 of a year and ending September~~
8 ~~30 of the same year, inclusive.~~

9 ~~—(57) "Director" means Director of the Division for Air Quality of the Energy and~~
10 ~~Environment Cabinet.~~

11 ~~—(58) "District" is defined by KRS 224.01-010(11).~~

12 ~~—(59) "dscf" means dry cubic feet at standard conditions.~~

13 ~~—(60) "dscm" means dry cubic meter at standard conditions.~~

14 ~~—(61) "Electric generating unit" means, for 401 KAR 51:160 to 51:195, a fossil fuel-~~
15 ~~fired boiler, combustion turbine, or a combined cycle system used to generate twenty-~~
16 ~~five (25) megawatts or more of electricity, some of which is offered for sale.~~

17 ~~—(62) "Electric utility steam generating unit" or "EUSGU" means, for the PSD and~~
18 ~~NSR programs:~~

19 ~~—(a) A steam electric generating unit constructed for the purpose of supplying for~~
20 ~~sale:~~

21 ~~—1. More than one third (1/3) of its potential electric output capacity; and~~

22 ~~—2. More than twenty-five (25) megawatt electrical output to a utility power distribution~~
23 ~~system for sale; and~~

1 ~~—(b) Steam to a steam electric generator that would produce electrical energy is also~~
2 ~~considered in determining the electrical energy output capacity of the affected facility.~~

3 ~~—(63) "Emission standard" means that numerical limit that fixes the amount of an air~~
4 ~~contaminant or air contaminants that may be vented into the atmosphere from an~~
5 ~~affected facility or from air pollution control equipment installed in an affected facility.~~

6 ~~—(64) "Emissions unit" means any part of a stationary source, including an EUSGU,~~
7 ~~that emits or has the potential to emit a regulated NSR pollutant. For 401 KAR 51:017~~
8 ~~and 51:052, there are two (2) types of emissions units:~~

9 ~~—(a) A new emissions unit, which is any emissions unit that is or will be newly~~
10 ~~constructed and that has existed for less than two (2) years from the date the unit first~~
11 ~~operated; and~~

12 ~~—(b) An existing emissions unit, which is any emissions unit that does not meet the~~
13 ~~requirements in paragraph (a) of this subsection or is a replacement unit.~~

14 ~~—(65) "Enforceable as a practical matter" means that the emission or other standards~~
15 ~~contained in a permit or compliance schedule include:~~

16 ~~—(a) Technically accurate emission standards and the portions of the source that are~~
17 ~~subject to the standards;~~

18 ~~—(b) A time period adequate to demonstrate compliance with the standards; and~~

19 ~~—(c) The method the source shall use to achieve and demonstrate compliance with~~
20 ~~the limitations and standards, including appropriate monitoring, recordkeeping, and~~
21 ~~reporting.~~

22 ~~—(66) "Equivalent method" means a method of sampling and analyzing for an air~~
23 ~~pollutant that has been demonstrated to the cabinet's and the U.S. EPA's satisfaction~~

1 ~~pursuant to 40 C.F.R. 53.3 to have a consistent and quantitatively known relationship to~~
2 ~~the reference method, under specified conditions.~~

3 ~~— (67) "Excess NOx emissions" means any tonnage of nitrogen oxides emitted by a~~
4 ~~NOx budget unit during a control period that exceeds the NOx budget emissions~~
5 ~~limitation for the unit.~~

6 ~~— (68) "Exempt compound" or "exempt solvent" means an organic compound listed in~~
7 ~~the definition of volatile organic compound as not participating in atmospheric~~
8 ~~photochemical reactions.~~

9 ~~— (69) "Existing source" means a source that is not a new source.~~

10 ~~— (70) "Extreme nonattainment county" or "extreme nonattainment area" means a~~
11 ~~county or portion of a county designated extreme nonattainment for the one (1) hour~~
12 ~~national ambient air quality standard for ozone in 401 KAR 51:010.~~

13 ~~— (71) "°F" means degree Fahrenheit.~~

14 ~~— (72) "Federal land manager" means, for any lands in the United States, the~~
15 ~~secretary of the department with authority over those lands.~~

16 ~~— (73) "Federally enforceable" means all limitations and conditions that are~~
17 ~~enforceable by the U.S. EPA, including:~~

18 ~~— (a) Requirements developed under 40 C.F.R. Parts 60 and 61;~~

19 ~~— (b) Requirements in the Kentucky state implementation plan (SIP) approved by the~~
20 ~~U.S. EPA; and~~

21 ~~— (c) Any permit requirements established under 40 C.F.R. 52.21 or under regulations~~
22 ~~approved under 40 C.F.R. Part 51, Subpart I, including operating permits issued under~~
23 ~~an EPA-approved program incorporated into the SIP, that expressly requires adherence~~

1 to a permit issued under the program.

2 ~~— (74) "Federally enforceable permit" means a permit issued under 401 KAR 52:020~~
3 ~~or 52:030, as appropriate.~~

4 ~~— (75) "Fixed capital cost" means the capital needed to provide all the depreciable~~
5 ~~components.~~

6 ~~— (76) "Fossil fuel" means natural gas; petroleum; coal; or a form of solid, liquid, or~~
7 ~~gaseous fuel derived from natural gas, petroleum, or coal.~~

8 ~~— (77) "Fossil fuel fired" means, for a unit:~~

9 ~~— (a) The combustion of fossil fuel, alone or in combination with another fuel, if the~~
10 ~~fossil fuel combusted comprises more than fifty (50) percent of the annual heat input on~~
11 ~~a BTU basis during a year starting in 1995 or, if a unit had no heat input starting in~~
12 ~~1995, during the last year of operation of the unit prior to 1995; or~~

13 ~~— (b) The combustion of fossil fuel, alone or in combination with another fuel, if the~~
14 ~~fossil fuel is projected to comprise more than fifty (50) percent of the annual heat input~~
15 ~~on a BTU basis during a year, and the unit is to be fossil fuel fired as of the date during~~
16 ~~the year the unit begins combusting fossil fuel.~~

17 ~~— (78) "ft" means feet or foot.~~

18 ~~— (79) "Fuel" means natural gas; petroleum; coal; wood; or a form of solid, liquid, or~~
19 ~~gaseous fuel derived from these materials for the purpose of creating useful heat.~~

20 ~~— (80) "Fugitive emissions" means those emissions that could not reasonably pass~~
21 ~~through a stack, chimney, vent, or other functionally equivalent opening.~~

22 ~~— (81) "g" means gram.~~

23 ~~— (82) "gal" means gallon.~~

- 1 ~~—(83) "General fund" is defined by KRS 48.010(15)(a).~~
- 2 ~~—(84) "Generator" means a device that produces electricity.~~
- 3 ~~—(85) "gr" means grain.~~
- 4 ~~—(86) "HCl" means hydrochloric acid.~~
- 5 ~~—(87) "Heat input" means the product, in MMBTU per unit of time, of the gross~~
6 ~~calorific value of the fuel, in BTU per lb, and the fuel feed rate into a combustion device,~~
7 ~~in mass of fuel per unit of time, that:~~
- 8 ~~—(a) Does not include the heat derived from preheated combustion air, recirculated~~
9 ~~flue gases, or exhaust from other sources; and~~
- 10 ~~—(b) Is measured, recorded, and reported to the cabinet by the NOx authorized~~
11 ~~account representative in accordance with 40 C.F.R. 96.70 to 96.76.~~
- 12 ~~—(88) "HF" means hydrogen fluoride.~~
- 13 ~~—(89) "Hg" means mercury.~~
- 14 ~~—(90) "High terrain" means an area having an elevation of 900 feet or more above the~~
15 ~~base of the stack of a source.~~
- 16 ~~—(91) "hr" means hour.~~
- 17 ~~—(92) "Hydrocarbon" means an organic compound consisting predominantly of~~
18 ~~carbon and hydrogen.~~
- 19 ~~—(93) "Hydrocarbon combustion flare" means:~~
- 20 ~~—(a) A flare used to comply with an applicable New Source Performance Standard~~
21 ~~(NSPS) or Maximum Achievable Control Technology (MACT) standard, including uses~~
22 ~~of flares during startup, shutdown, or malfunction permitted under the standard; or~~
- 23 ~~—(b) A flare that serves to control emissions of waste streams comprised~~

- 1 ~~predominately of hydrocarbons and containing no more than 230 µg/dscm hydrogen~~
2 ~~sulfide.~~
- 3 ~~—(94) "H₂O" means water.~~
- 4 ~~—(95) "H₂S" means hydrogen sulfide.~~
- 5 ~~—(96) "H₂SO₄" means sulfuric acid.~~
- 6 ~~—(97) "in" means inch.~~
- 7 ~~—(98) "Incineration" means the process of igniting and burning solid, semisolid, liquid,~~
8 ~~or gaseous combustible wastes.~~
- 9 ~~—(99) "Industrial boiler or turbine" means a fossil fuel-fired boiler, combustion turbine,~~
10 ~~or a combined cycle system having a maximum design heat input of 250 MMBTU per~~
11 ~~hour or more that is not an electric generating unit.~~
- 12 ~~—(100) "Innovative control technology" means a system of air pollution control that~~
13 ~~has not been adequately demonstrated in practice, but has a substantial likelihood of~~
14 ~~achieving:~~
- 15 ~~—(a) Greater continuous emissions reduction than any control system in current~~
16 ~~practice; or~~
- 17 ~~—(b) At least comparable reductions at lower cost in terms of energy, economics, or~~
18 ~~nonair quality environmental impacts.~~
- 19 ~~—(101) "Intermittent emissions" means emissions of particulate matter into the open~~
20 ~~air from a process that operates for less than any six (6) consecutive minutes.~~
- 21 ~~—(102) "J" means joule.~~
- 22 ~~—(103) "Kg" means kilogram.~~
- 23 ~~—(104) "l" means liter.~~

- 1 ~~—(105) "lb" means pound.~~
- 2 ~~—(106) "Legally enforceable" means the cabinet or the U.S. EPA has the authority to~~
3 ~~enforce a certain restriction.~~
- 4 ~~—(107) "Long dry kiln" means a kiln that employs no preheating of the feed and has a~~
5 ~~dry inlet feed.~~
- 6 ~~—(108) "Long wet kiln" means a kiln that employs no preheating of the feed and the~~
7 ~~inlet feed to the kiln is a slurry.~~
- 8 ~~—(109) "Low terrain" means an area other than high terrain.~~
- 9 ~~—(110) "Lowest achievable emissions rate" or "LAER" means, for any source, the~~
10 ~~more stringent rate of emissions based on:~~
- 11 ~~—(a) The most stringent emissions limitation that is contained in the Kentucky SIP for~~
12 ~~the class or category of stationary source, unless the owner or operator of the proposed~~
13 ~~stationary source demonstrates that the limitations are not achievable; or~~
- 14 ~~—(b) The most stringent emissions limitation that is achieved in practice by the class~~
15 ~~or category of stationary sources.~~
- 16 ~~— 1. If this limitation is applied to a modification, this is the lowest achievable~~
17 ~~emissions rate for the new or modified emissions units at the stationary source.~~
- 18 ~~— 2. The application of this term does not permit a proposed new or modified~~
19 ~~stationary source to emit any pollutant in excess of the amount allowable under an~~
20 ~~applicable new source standard of performance.~~
- 21 ~~—(111) "m" means meter.~~
- 22 ~~—(112) "m³" means cubic meter.~~
- 23 ~~—(113) "Major emissions unit" means:~~

1 ~~— (a) Any emissions unit that emits or has the potential to emit 100 tons per year or~~
2 ~~more of a PAL pollutant in an attainment area; or~~

3 ~~— (b) Any emissions unit that emits or has the potential to emit a PAL pollutant in an~~
4 ~~amount that is equal to or greater than the major source threshold for the PAL pollutant~~
5 ~~as defined by the Clean Air Act, 42 U.S.C. 7401-7671q for nonattainment areas.~~

6 ~~— (114) "Major modification" is defined by 40 C.F.R. 51.165(a)(1)(v) for 401 KAR~~
7 ~~51:052 and by 40 C.F.R. 51.166(b)(2) for 401 KAR 51:017.~~

8 ~~— (115) "Major NSR permit" means a permit issued under Kentucky's PSD or NSR~~
9 ~~program.~~

10 ~~— (116) "Major source" means a source with a potential emission rate equal to or~~
11 ~~greater than 100 tons per year of any one (1) of the following pollutants: particulate~~
12 ~~matter, sulfur oxides, nitrogen oxides, volatile organic compounds, carbon monoxide, or~~
13 ~~ODS.~~

14 ~~— (117) "Major source baseline date" means:~~

15 ~~— (a) For particulate matter and sulfur dioxide, January 6, 1975; and~~

16 ~~— (b) For nitrogen dioxide, February 8, 1988.~~

17 ~~— (118)(a) "Major stationary source" means:~~

18 ~~— 1.a. A stationary source of air pollutants that emits, or has the potential to emit, 100~~
19 ~~tons per year or more of a regulated NSR pollutant, except that the following lower~~
20 ~~emissions thresholds apply:~~

21 ~~— (i) For ozone nonattainment areas: one hundred (100) tons per year or more of~~
22 ~~volatile organic compounds or nitrogen oxides in a marginal or moderate ozone~~
23 ~~nonattainment area; fifty (50) tons per year or more of volatile organic compounds or~~

1 ~~nitrogen oxides in a serious ozone nonattainment area; twenty-five (25) tons per year or~~
2 ~~more of volatile organic compounds or nitrogen oxides in a severe ozone nonattainment~~
3 ~~area; or ten (10) tons per year or more of volatile organic compounds or nitrogen oxides~~
4 ~~in an extreme ozone nonattainment area;~~

5 ~~— (ii) Fifty (50) tons per year or more of carbon monoxide in a serious carbon~~
6 ~~monoxide nonattainment area where stationary sources contribute significantly to~~
7 ~~carbon monoxide levels; and~~

8 ~~— (iii) Seventy (70) tons per year or more of particulate matter (PM₁₀) in a serious PM₁₀~~
9 ~~nonattainment area; or~~

10 ~~— b.(i) For the PSD program, any of the following stationary sources of air pollutants~~
11 ~~that emits, or has the potential to emit, 100 tons per year or more of a regulated NSR~~
12 ~~pollutant: fossil fuel fired steam electric plants of more than 250 million BTU per hour~~
13 ~~heat input, coal cleaning plants with thermal dryers, kraft pulp mills, portland cement~~
14 ~~plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction~~
15 ~~plants, primary copper smelters, municipal incinerators capable of charging more than~~
16 ~~250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum~~
17 ~~refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur~~
18 ~~recovery plants, carbon black plants (furnace process), primary lead smelters, fuel~~
19 ~~conversion plants, sintering plants, secondary metal production plants, chemical~~
20 ~~process plants, except ethanol production facilities producing ethanol by natural~~
21 ~~fermentation under the North American Industry Classification System (NAICS) codes~~
22 ~~325193 or 312140, fossil fuel boilers, or combination of fossil fuel boilers, totaling more~~
23 ~~than 250 million BTU per hour heat input, petroleum storage and transfer units with a~~

1 ~~total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass~~
2 ~~fiber processing plants, and charcoal production plants;~~
3 ~~— (ii) Regardless of the stationary source size specified in subclause (i) of this clause,~~
4 ~~a stationary source that emits, or has the potential to emit, 250 tons per year or more of~~
5 ~~a regulated NSR pollutant; or~~
6 ~~— 2. Any physical change that will occur at a stationary source not otherwise qualifying~~
7 ~~under this subsection as a major stationary source, if the change will constitute a major~~
8 ~~stationary source by itself.~~
9 ~~— (b) A major stationary source that is major for volatile organic compounds or~~
10 ~~nitrogen oxides is considered major for ozone.~~
11 ~~— (c) The fugitive emissions of a stationary source are not included in determining if~~
12 ~~the source is a major stationary source, unless the source belongs to one (1) of the~~
13 ~~following categories of stationary sources:~~
14 ~~— 1. Coal cleaning plants with thermal dryers;~~
15 ~~— 2. Kraft pulp mills;~~
16 ~~— 3. Portland cement plants;~~
17 ~~— 4. Primary zinc smelters;~~
18 ~~— 5. Iron and steel mills;~~
19 ~~— 6. Primary aluminum ore reduction plants;~~
20 ~~— 7. Primary copper smelters;~~
21 ~~— 8. Municipal incinerators capable of charging more than 250 tons of refuse per day;~~
22 ~~— 9. Hydrofluoric, sulfuric, or nitric acid plants;~~
23 ~~— 10. Petroleum refineries;~~

- 1 ~~11. Lime plants;~~
- 2 ~~12. Phosphate rock processing plants;~~
- 3 ~~13. Coke oven batteries;~~
- 4 ~~14. Sulfur recovery plants;~~
- 5 ~~15. Carbon black plants (furnace process);~~
- 6 ~~16. Primary lead smelters;~~
- 7 ~~17. Fuel conversion plants;~~
- 8 ~~18. Sintering plants;~~
- 9 ~~19. Secondary metal production plants;~~
- 10 ~~20. Chemical process plants, except ethanol production facilities producing ethanol~~
11 ~~by natural fermentation under NAICS codes 325193 or 312140;~~
- 12 ~~21. Fossil fuel boilers, or combination of fossil fuel boilers, totaling more than 250~~
13 ~~million BTUs per hour heat input;~~
- 14 ~~22. Petroleum storage and transfer units with a total storage capacity exceeding~~
15 ~~300,000 barrels;~~
- 16 ~~23. Taconite ore processing plants;~~
- 17 ~~24. Glass fiber processing plants;~~
- 18 ~~25. Charcoal production plants;~~
- 19 ~~26. Fossil fuel fired steam electric plants of more than 250 million BTUs per hour~~
20 ~~heat input; or~~
- 21 ~~27. Another stationary source category that, as of August 7, 1980, is being regulated~~
22 ~~under 42 U.S.C. 7411 or 7412.~~
- 23 ~~(119) "Malfunction" means a sudden and infrequent failure of air pollution control~~

1 ~~equipment, process equipment, or a process to operate in a normal or usual manner~~
2 ~~that is not caused entirely or in part by poor maintenance, careless operation, or other~~
3 ~~upset condition or equipment breakdown that is reasonably preventable.~~

4 ~~— (120) "Mandatory Class I area" means an area identified in 40 C.F.R. Part 81,~~
5 ~~Subpart D, if the administrator of the U.S. EPA, in consultation with the Secretary of the~~
6 ~~United States Department of Interior, has determined visibility to be an important value.~~

7 ~~— (121) "Marginal nonattainment county" or "marginal nonattainment area" means a~~
8 ~~county or portion of a county designated marginal nonattainment for the one (1) hour~~
9 ~~national ambient air quality standard for ozone in 401 KAR 51:010.~~

10 ~~— (122) "Maximum design heat input" means the ability of a unit to combust a stated~~
11 ~~maximum amount of fuel per hour on a steady state basis, as determined by the~~
12 ~~physical design and physical characteristics of the unit.~~

13 ~~— (123) "Maximum potential hourly heat input" means an hourly heat input used for~~
14 ~~reporting purposes if a unit lacks certified monitors to report heat input and is:~~

15 ~~— (a) A value calculated according to 40 C.F.R. Part 75 using the maximum fuel flow~~
16 ~~rate and the maximum gross calorific value, if the unit intends to use 40 C.F.R. Part 75,~~
17 ~~Appendix D to report heat input; or~~

18 ~~— (b) A value reported according to 40 C.F.R. Part 75 using the maximum potential~~
19 ~~flow rate and either the maximum percent CO₂ concentration (in percent CO₂) or the~~
20 ~~minimum percent O₂, if the unit intends to use a flow monitor and a diluent gas monitor.~~

21 ~~— (124) "Maximum potential NOx emission rate" means the emission rate of NOx (in lb~~
22 ~~per MMBTU) calculated according to 40 C.F.R. Part 75, Appendix F, Section 3, using~~
23 ~~the maximum potential NOx concentration as defined in 40 C.F.R. Part 75, Appendix A,~~

1 ~~Section 2, and the maximum percent O₂ or the minimum percent CO₂ under all~~
2 ~~operating conditions of the unit except for unit startup, shutdown, and malfunction.~~

3 ~~— (125) "Maximum rated hourly heat input" means a unit specific maximum hourly~~
4 ~~heat input (MMBTU) that is the higher of the manufacturer's maximum rated hourly heat~~
5 ~~input or the highest observed hourly heat input.~~

6 ~~— (126) "mg" means microgram.~~

7 ~~— (127) "mg" means milligram.~~

8 ~~— (128) "Mid kiln firing" means the secondary firing in kilns by injecting solid fuel at an~~
9 ~~intermediate point in the kiln using a specially designed feed injection mechanism for~~
10 ~~the purpose of decreasing NO_x emissions through:~~

11 ~~— (a) Burning part of the fuel at a lower temperature; and~~

12 ~~— (b) Reducing conditions at the solid waste injection point that may destroy some of~~
13 ~~the NO_x formed upstream in the kiln burning zone.~~

14 ~~— (129) "min" means minute.~~

15 ~~— (130) (a) "Minor source baseline date" means the earliest date after the trigger date~~
16 ~~on which a major stationary source or a major modification subject to 40 C.F.R. 52.21 or~~
17 ~~to administrative regulations approved under the 40 C.F.R. 51.166 submits a complete~~
18 ~~application under applicable administrative regulations.~~

19 ~~— 1. For particulate matter and sulfur dioxide, the trigger date is August 7, 1977; and~~

20 ~~— 2. For nitrogen dioxide, the trigger date is February 8, 1988.~~

21 ~~— (b) A minor source baseline date established originally for the TSP increments~~
22 ~~remains in effect to determine the amount of available PM₁₀ increments, except that the~~
23 ~~cabinet may rescind the minor source baseline date pursuant to 40 C.F.R.~~

1 ~~51.166(b)(14)(iv) if it is demonstrated to the satisfaction of the cabinet that the~~
2 ~~emissions increase from the major modification responsible for triggering that date did~~
3 ~~not result in a significant amount of PM₁₀ emissions.~~

4 ~~— (c) The baseline date is established for each pollutant for which increments or other~~
5 ~~equivalent measures have been established if:~~

6 ~~— 1. The area in which the proposed source or modification will construct is~~
7 ~~designated as attainment or unclassifiable pursuant to 42 U.S.C. 7407 (d)(1)(A)(ii) or (iii)~~
8 ~~for the pollutant on the date of its complete application pursuant to 401 KAR Chapter~~
9 ~~52; and~~

10 ~~— 2. For a major stationary source, the pollutant will be emitted in significant amounts~~
11 ~~or a significant net emissions increase of the pollutant will occur for a major~~
12 ~~modification.~~

13 ~~— (131) "MJ" means megajoules.~~

14 ~~— (132) "mm" means millimeter.~~

15 ~~— (133) "MM" means million.~~

16 ~~— (134) "mo" means month.~~

17 ~~— (135) "Moderate nonattainment county" or "moderate nonattainment area" means a~~
18 ~~county or portion of a county designated moderate nonattainment for the one (1) hour~~
19 ~~national ambient air quality standard for ozone in 401 KAR 51:010.~~

20 ~~— (136) "Modification" means any physical change in, or a change in the method of~~
21 ~~operation of, an affected facility that:~~

22 ~~— (a) Increases the amount of any air pollutant (to which a standard applies) emitted~~
23 ~~into the atmosphere by that facility or that results in the emission of any air pollutant (to~~

1 ~~which a standard applies) into the atmosphere not previously emitted; and~~

2 ~~—(b) Is not solely:~~

3 ~~— 1. Maintenance, repair, and replacement that the cabinet determines to be routine~~
4 ~~for a source category;~~

5 ~~— 2. An increase in production rate of an affected facility, if that increase can be~~
6 ~~accomplished without a capital expenditure on that facility;~~

7 ~~— 3. An increase in the hours of operation;~~

8 ~~— 4. Use of an alternative fuel or raw material if, prior to the date a standard becomes~~
9 ~~applicable to that source type, the affected facility was designed to accommodate that~~
10 ~~alternative use. A facility is considered to be designed to accommodate an alternative~~
11 ~~fuel or raw material if that use could be accomplished under the facility's construction~~
12 ~~specifications as amended prior to the change;~~

13 ~~— 5. Conversion to coal required for energy considerations, as specified in 42 U.S.C.~~
14 ~~7411(a)(8);~~

15 ~~— 6. The addition or use of a system or device the primary function of which is the~~
16 ~~reduction of air pollutants, unless an emission control system is removed or replaced by~~
17 ~~a system that the cabinet determines to be less environmentally beneficial; or~~

18 ~~— 7. The relocation or change in ownership of a source.~~

19 ~~— (137) "Monitoring device" means the total equipment, required by an applicable~~
20 ~~administrative regulation in 401 KAR Chapters 50 to 65, used to measure and record, if~~
21 ~~applicable, process parameters.~~

22 ~~— (138) "Monitoring system" means a monitoring system that meets the requirements~~
23 ~~of 40 C.F.R. Part 96.~~

1 ~~— (139) "MWe" means megawatt electrical.~~

2 ~~— (140) "N₂" means nitrogen.~~

3 ~~— (141) "Nameplate capacity" means the maximum electrical generating output (in~~
4 ~~MWe) that a generator can sustain over a specified period of time if not restricted by~~
5 ~~seasonal or other deratings as measured with United States Department of Energy~~
6 ~~standards pursuant to 40 C.F.R. 96.2.~~

7 ~~— (142) "Natural conditions" means those naturally occurring phenomena that reduce~~
8 ~~visibility as measured in terms of visual range, contrast, or coloration.~~

9 ~~— (143) "Necessary preconstruction approvals or permits" means those permits or~~
10 ~~approvals required under the administrative regulations approved to the Kentucky SIP~~
11 ~~pursuant to 40 C.F.R. 52.920, and federal air quality control laws and regulations~~
12 ~~established pursuant to 42 U.S.C. 7401-7671q.~~

13 ~~— (144) (a) "Net emissions increase" means, for any regulated NSR pollutant emitted~~
14 ~~by a major stationary source, the amount by which the sum of subparagraphs 1 and 2 of~~
15 ~~this paragraph exceeds zero:~~

16 ~~— 1. An increase in emissions from a particular physical change or change in method~~
17 ~~of operation at a stationary source as calculated pursuant to 401 KAR 51:017, Section~~
18 ~~1(4), or 401 KAR 51:052, Section 1(2); and~~

19 ~~— 2. Any other increases and decreases in actual emissions at the major stationary~~
20 ~~source that are contemporaneous with the particular change and are otherwise~~
21 ~~creditable. Baseline actual emissions for calculating increases and decreases under this~~
22 ~~paragraph are determined as defined in this section.~~

23 ~~— (b) An increase or decrease in actual emissions is contemporaneous with the~~

- 1 ~~increase from the particular change only if:~~
- 2 ~~— 1. For construction that commences prior to January 6, 2002, the change occurs~~
- 3 ~~between the date ten (10) years before construction on the change commences, and~~
- 4 ~~the date that the increase from the change occurs; and~~
- 5 ~~— 2. For construction that commences on and after January 6, 2002, the change~~
- 6 ~~occurs between the date five (5) years before construction on the change commences,~~
- 7 ~~and the date that the increase from the change occurs.~~
- 8 ~~— (c) An increase or decrease in actual emissions is creditable only if:~~
- 9 ~~— 1. The cabinet or the U.S. EPA has not relied on the change in issuing a permit for~~
- 10 ~~the source pursuant to 401 KAR 51:017, 51:052, or 40 C.F.R. 52.21; and~~
- 11 ~~— 2. The permit is in effect at the time the increase or decrease in actual emissions~~
- 12 ~~from the particular change occurs.~~
- 13 ~~— (d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter,~~
- 14 ~~or nitrogen oxides that occurs before the applicable minor source baseline date is~~
- 15 ~~creditable only if it is required to be considered in calculating the amount of maximum~~
- 16 ~~allowable increases remaining available. For particulate matter, only PM₁₀ emissions~~
- 17 ~~are used to evaluate the net emissions increase for PM₁₀.~~
- 18 ~~— (e) An increase in actual emissions is creditable only to the extent that the new level~~
- 19 ~~of actual emissions exceeds the old level.~~
- 20 ~~— (f) A decrease in actual emissions is creditable only to the extent that:~~
- 21 ~~— 1. The old level of actual emissions or the old level of allowable emissions,~~
- 22 ~~whichever is lower, exceeds the new level of actual emissions;~~
- 23 ~~— 2. The decrease is enforceable as a practical matter at and after the time that actual~~

1 ~~construction on the particular change begins; and~~

2 ~~3. The decrease has approximately the same qualitative significance for public~~

3 ~~health and welfare as that attributed to the increase from the particular change.~~

4 ~~(g) An increase that results from a physical change at a source occurs if the~~

5 ~~emissions unit on which construction occurred becomes operational and begins to emit~~

6 ~~a particular pollutant. A replacement unit that requires shakedown becomes operational~~

7 ~~only after a reasonable shakedown period, not to exceed 180 days.~~

8 ~~(h) The term, actual emissions, as defined in subsection (2) of this section does not~~

9 ~~apply in determining creditable increases and decreases.~~

10 ~~(145) "New source" means a source, the construction, reconstruction, or~~

11 ~~modification of which commenced on or after the classification date as defined in the~~

12 ~~applicable administrative regulation, irrespective of a change in emission rate.~~

13 ~~(146) "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as~~

14 ~~measured by test methods specified by the cabinet.~~

15 ~~(147) "ng" means nanograms.~~

16 ~~(148) "NO" means nitric oxide.~~

17 ~~(149) "NO₂" means nitrogen dioxide.~~

18 ~~(150) "Nonattainment major new source review program" or "NSR program" means~~

19 ~~a major source preconstruction permit program that has been approved by the U.S.~~

20 ~~EPA and incorporated into the Kentucky SIP to implement the requirements of 40~~

21 ~~C.F.R. 51.165 and 40 C.F.R. Part 51, Appendix S.~~

22 ~~(151) "NO_x" means nitrogen oxides.~~

23 ~~(152) "NO_x allowance" means an authorization to emit one (1) ton of NO_x during a~~

1 control period under the NOx Budget Trading Program.

2 ~~— (153) "NOx Allowance Tracking System (NATS)" means the system by which the~~
3 ~~U.S. EPA records allocations, deductions, and transfers of NOx allowances under the~~
4 ~~NOx Budget Trading Program.~~

5 ~~— (154) "NOx authorized account representative" means the person who is authorized~~
6 ~~by the owner or operator to:~~

7 ~~— (a) Represent and legally bind the owner and operator in all matters pertaining to~~
8 ~~the NOx Budget Trading Program in accordance with 40 C.F.R. Part 96, Subpart B for a~~
9 ~~NOx budget source and all NOx budget units at the source; and~~

10 ~~— (b) Transfer or otherwise dispose of NOx allowances held in the general account in~~
11 ~~accordance with 40 C.F.R. Part 96, Subpart F, for a general account.~~

12 ~~— (155) "NOx budget emissions limitation" means, for a NOx budget unit, the tonnage~~
13 ~~equivalent of the NOx allowances available for compliance deduction for the unit and for~~
14 ~~a control period under 401 KAR 51:160 adjusted by deductions of sufficient NOx~~
15 ~~allowances to account for:~~

16 ~~— (a) Actual utilization under 40 C.F.R. 96.42(e) for the control period;~~

17 ~~— (b) Excess NOx emissions for a prior control period under 40 C.F.R. 96.54(d);~~

18 ~~— (c) Withdrawal from the NOx budget program under 40 C.F.R. 96.86; or~~

19 ~~— (d) A change in regulatory status for a NOx budget opt-in source under 40 C.F.R.~~
20 ~~96.87.~~

21 ~~— (156) "NOx budget opt-in source" means an affected facility that has elected to~~
22 ~~become a NOx budget unit under the NOx Budget Trading Program and whose NOx~~
23 ~~budget opt-in permit has been issued and is in effect.~~

1 ~~— (157) "NOx budget source" means a source that includes one (1) or more NOx~~
2 ~~budget units.~~

3 ~~— (158) "NOx Budget Trading Program" means the multistate NOx air pollution control~~
4 ~~and emission reduction program established and administered by the U.S. EPA under~~
5 ~~40 C.F.R. 51.121 or 52.34, as a means of mitigating the interstate transport of O₃, O₃~~
6 ~~precursors, and NOx.~~

7 ~~— (159) "NOx budget unit" means a unit that is subject to the NOx Budget Trading~~
8 ~~Program emissions limitation under 401 KAR 51:160 or 40 C.F.R. 96.80.~~

9 ~~— (160) "NOx budget unit operator" means a person who operates, controls, or~~
10 ~~supervises a NOx budget unit, a NOx budget source, or a unit for which an application~~
11 ~~for a NOx budget opt in permit under 401 KAR 51:195 is submitted and not denied or~~
12 ~~withdrawn and includes a holding company, utility system, or plant manager of a NOx~~
13 ~~budget unit or source.~~

14 ~~— (161) "NOx budget unit owner" means:~~

15 ~~— (a) A holder of a portion of the legal or equitable title in a NOx budget unit or in a~~
16 ~~unit for which an application for a NOx budget opt in permit under 401 KAR 51:195 is~~
17 ~~submitted and not denied or withdrawn;~~

18 ~~— (b) A holder of a leasehold interest in a NOx budget unit or in a unit for which an~~
19 ~~application for a NOx budget opt in permit under 401 KAR 51:195 is submitted and not~~
20 ~~denied or withdrawn;~~

21 ~~— (c) A purchaser of power from a NOx budget unit or from a unit for which an~~
22 ~~application for a NOx budget opt in permit under 401 KAR 51:195 is submitted and not~~
23 ~~denied or withdrawn under a life-of-the-unit, firm power contractual arrangement and~~

1 ~~unless expressly provided for in a leasehold agreement, does not include a passive~~
2 ~~lessor, or a person who has an equitable interest through the lessor, whose rental~~
3 ~~payments are not based, either directly or indirectly, upon the revenues or income from~~
4 ~~the NOx budget unit or the unit for which an application for a NOx budget opt in permit~~
5 ~~under 401 KAR 51:195 is submitted and not denied or withdrawn; or~~

6 ~~—(d) For any general account, a person who has an ownership interest with respect to~~
7 ~~the NOx allowances held in the general account and who is subject to the binding~~
8 ~~agreement for the NOx authorized account representative to represent that person's~~
9 ~~ownership.~~

10 ~~—(162) "O₂" means oxygen.~~

11 ~~—(163) "O₃" means ozone.~~

12 ~~—(164) "Opacity" means the degree to which emissions reduce the transmission of~~
13 ~~light and obscure the view of an object in the background.~~

14 ~~—(165) "Operating" means, for a NOx budget unit, having documented heat input for~~
15 ~~more than 876 hours in the six (6) months immediately preceding the submission of an~~
16 ~~application for an initial NOx budget permit.~~

17 ~~—(166) "Operator" means, for a NOx budget unit, any person who operates, controls,~~
18 ~~or supervises a NOx budget unit, a NOx budget source, or unit for which an application~~
19 ~~for a NOx budget opt in permit is submitted and not denied or withdrawn, and includes~~
20 ~~any holding company, utility system, or plant manager of the unit or source.~~

21 ~~—(167) "Opt in" means to be elected to become a NOx budget unit under the NOx~~
22 ~~Budget Trading Program through a final NOx budget opt in permit.~~

23 ~~—(168) "Owner" means, for a NOx budget unit, the following persons:~~

1 ~~— (a) A holder of any portion of the legal or equitable title in a NOx budget unit or in a~~
2 ~~unit for which an application for a NOx budget opt in permit under 40 C.F.R. 96.83 is~~
3 ~~submitted and not denied or withdrawn;~~

4 ~~— (b) A holder of a leasehold interest in a NOx budget unit or in a unit for which an~~
5 ~~application for a NOx budget opt in permit under 40 C.F.R. Part 96.83 is submitted and~~
6 ~~not denied or withdrawn;~~

7 ~~— (c) A purchaser of power from a NOx budget unit or from a unit for which an~~
8 ~~application for a NOx budget opt in permit under 40 C.F.R. 96.83 is submitted and not~~
9 ~~denied or withdrawn under a life of the unit, firm power contractual arrangement and~~
10 ~~unless expressly provided for in a leasehold agreement, does not include a passive~~
11 ~~lessor, or a person who has an equitable interest through the lessor, whose rental~~
12 ~~payments are not based upon the revenues or income from the NOx budget unit or the~~
13 ~~unit for which an application for a NOx budget opt in permit under 40 C.F.R. 96.83 is~~
14 ~~submitted and not denied or withdrawn; or~~

15 ~~— (d) With respect to a general account, a person who has an ownership interest with~~
16 ~~respect to NOx allowances held in the general account and who is subject to the binding~~
17 ~~agreement for the NOx authorized account representative to represent that person's~~
18 ~~ownership interest with respect to NOx allowances.~~

19 ~~— (169) "Owner or operator" means a person who owns, leases, operates, controls, or~~
20 ~~supervises an affected facility or a source to which an affected facility is a part.~~

21 ~~— (170) "oz" means ounce.~~

22 ~~— (171) "Ozone depleting potential" or "ODP", means pursuant to 40 C.F.R. Part 82,~~
23 ~~Subpart A, Appendices A and B, the ratio of the total amount of ozone destroyed by a~~

1 ~~fixed amount of an ozone depleting substance to the amount of ozone destroyed by the~~
2 ~~same mass of trichloroflouromethane(CFC 11) in which the ozone depleting potential of~~
3 ~~CFC 11 is equal to one and zero tenths (1.0).~~

4 ~~— (172) "Ozone depleting substance" or "ODS" means any chemical compound~~
5 ~~regulated under 40 C.F.R. Part 82 with decay products, after the photolysis of the ODS~~
6 ~~by short wave ultraviolet light, that are able to catalyze the destruction of stratospheric~~
7 ~~ozone.~~

8 ~~— (173) "PAL effective date" means:~~

9 ~~— (a) The date of issuance of the PAL permit; or~~

10 ~~— (b) For an increased PAL, the date any emissions unit that is part of the PAL major~~
11 ~~modification becomes operational and begins to emit the PAL pollutant.~~

12 ~~— (174) "PAL effective period" means the period beginning with the PAL effective date~~
13 ~~and ending ten (10) years later.~~

14 ~~— (175) "PAL major modification" means any physical change in or a change in the~~
15 ~~method of operation of the PAL source that causes it to emit the PAL pollutant at a level~~
16 ~~equal to or greater than the PAL.~~

17 ~~— (176) "PAL permit" means the permit issued by the cabinet that establishes a PAL~~
18 ~~for a major stationary source.~~

19 ~~— (177) "PAL pollutant" means the pollutant for which a PAL is established at a major~~
20 ~~stationary source.~~

21 ~~— (178) "Particulate matter" means a material, except uncombined water that exists in~~
22 ~~a finely divided form as a liquid or a solid measured by an approved test method.~~

23 ~~— (179) "Particulate matter emissions" means, except as used in 40 C.F.R. Part 60, all~~

1 ~~finely divided solid or liquid material, other than uncombined water, emitted to the~~
2 ~~ambient air as measured by applicable reference methods, or an equivalent or~~
3 ~~alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the~~
4 ~~Kentucky SIP.~~

5 ~~— (180) "Peak load" means the maximum instantaneous operating load.~~

6 ~~— (181) "Permitted capacity factor" means the annual permitted fuel use divided by the~~
7 ~~manufacturer's specified maximum fuel consumption multiplied by 8,760 hours per year.~~

8 ~~— (182) "Person" is defined by KRS 224.01-010(17).~~

9 ~~— (183) "Plant wide applicability limitation" or "PAL" means an emission limitation,~~
10 ~~expressed in tons per year, for a pollutant at a major stationary source, that is~~
11 ~~enforceable as a practical matter and is established source wide in accordance with 401~~
12 ~~KAR 51:017 or 51:052.~~

13 ~~— (184) "PM_{2.5}" means particulate matter with an aerodynamic diameter less than or~~
14 ~~equal to a nominal two and five tenths (2.5) micrometers as measured by a reference~~
15 ~~method in 40 C.F.R. Part 50, Appendix L, and designated in accordance with 40 C.F.R.~~
16 ~~Part 53, or by an equivalent method designated in accordance with 40 C.F.R. Part 53.~~

17 ~~— (185) "PM₁₀" means particulate matter with an aerodynamic diameter less than or~~
18 ~~equal to a nominal ten (10) micrometers as measured by a reference method in 40~~
19 ~~C.F.R. Part 50, Appendix J and designated in accordance with 40 C.F.R. Part 53, or by~~
20 ~~an equivalent method designated in accordance with 40 C.F.R. Part 53.~~

21 ~~— (186) "PM₁₀ emissions" means finely divided solid or liquid material with an~~
22 ~~aerodynamic diameter less than or equal to a nominal ten (10) micrometers emitted to~~
23 ~~the ambient air as measured by an applicable reference method, or an equivalent or~~

1 ~~alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the~~
2 ~~Kentucky SIP.~~

3 ~~— (187) "Pollution prevention" means any activity that through process changes,~~
4 ~~product reformulation or redesign or substitution of less polluting raw materials,~~
5 ~~eliminates or reduces the release of air pollutants to the environment, including fugitive~~
6 ~~emissions, prior to recycling, treatment, or disposal and does not include recycling,~~
7 ~~other than certain in-process recycling practices, energy recovery, treatment, or~~
8 ~~disposal.~~

9 ~~— (188) "Portland cement" means a hydraulic cement produced by pulverizing clinker~~
10 ~~consisting essentially of hydraulic calcium silicates.~~

11 ~~— (189) "Portland cement kiln" means a system, including solid, gaseous or liquid fuel~~
12 ~~combustion equipment, used to calcine and fuse raw materials, including limestone and~~
13 ~~clay, to produce Portland cement clinker.~~

14 ~~— (190) "Potential to emit" or "PTE" means:~~

15 ~~— (a) The maximum capacity of a stationary source to emit a pollutant under its~~
16 ~~physical and operational design, in which:~~

17 ~~— 1. A physical or operational limitation on the capacity of a source to emit an air~~
18 ~~pollutant, including air pollution control equipment and restrictions on hours of operation~~
19 ~~or on the type or amount of material combusted, stored, or processed, is treated as part~~
20 ~~of its design if the limitation is enforceable as a practical matter; and~~

21 ~~— 2. This definition does not alter or affect the use of this term for other purposes of~~
22 ~~the Clean Air Act, 42 U.S.C. 7401-7671q, or the term "capacity factor" as used in the~~
23 ~~Acid Rain Program.~~

1 ~~— (b) For the PSD and NSR programs, the maximum capacity of a stationary source to~~
2 ~~emit a pollutant under its physical or operational design, in which:~~

3 ~~— 1. A physical or operational limitation on the capacity of the source to emit a~~
4 ~~pollutant, including air pollution control equipment and restrictions on hours of operation~~
5 ~~or on the type or amount of material combusted, stored, or processed, is treated as part~~
6 ~~of its design if the limitation or the effect it would have on emissions:~~

7 ~~— a. Is federally enforceable; or~~

8 ~~— b. For an actuals PAL, is federally enforceable or enforceable as a practical matter;~~
9 ~~and~~

10 ~~— 2. Secondary emissions are not counted.~~

11 ~~— (191) "ppb" means parts per billion.~~

12 ~~— (192) "ppm" means parts per million.~~

13 ~~— (193) "ppm(w/w)" means parts per million (weight by weight).~~

14 ~~— (194) "Precalciner kiln" means a kiln in which the feed to the kiln system is~~
15 ~~preheated in cyclone chambers and utilizes a second burner to calcine material in a~~
16 ~~separate vessel attached to the preheater prior to the final fusion in a kiln that forms~~
17 ~~clinker.~~

18 ~~— (195) "Predictive emissions monitoring system" or "PEMS" means all of the~~
19 ~~equipment necessary to monitor process parameters, such as control device secondary~~
20 ~~voltages and electric currents, and to monitor control device operational parameters,~~
21 ~~such as gas flow rate, ozone concentrations or carbon dioxide concentrations, and to~~
22 ~~calculate and record the mass emissions rate on a continuous basis.~~

23 ~~— (196) "Preheater kiln" means a kiln in which the feed to the kiln system is preheated~~

1 ~~in cyclone chambers prior to the final fusion in a kiln that forms clinker.~~

2 ~~— (197) "Prevention of Significant Deterioration Program" or "PSD Program" means a~~
3 ~~major source preconstruction program that has been approved by the U.S. EPA and~~
4 ~~incorporated into the Kentucky SIP to implement the requirements of 40 C.F.R. 51.166~~
5 ~~or 52.21.~~

6 ~~— (198) "Project" means a physical change in or change in method of operation of an~~
7 ~~existing major stationary source.~~

8 ~~— (199) "Projected actual emissions" means:~~

9 ~~— (a) The maximum annual rate, in tons per year, at which an existing emissions unit~~
10 ~~is projected to emit a regulated NSR pollutant in any one (1) of the five (5) years, in a~~
11 ~~twelve (12) month period, following the date the unit resumes regular operation after the~~
12 ~~project, or in any one (1) of the ten (10) years following that date, if:~~

13 ~~— 1. The project involves increasing the emissions unit's design capacity or its~~
14 ~~potential to emit the regulated NSR pollutant; and~~

15 ~~— 2. Full utilization of the unit would result in a significant emissions increase or a~~
16 ~~significant net emissions increase at the major stationary source.~~

17 ~~— (b) To determine projected actual emissions, before beginning actual construction,~~
18 ~~the owner or operator of the major stationary source:~~

19 ~~— 1.a. Considers all relevant information, including historical operational data and the~~
20 ~~company's own representations of expected and highest projected business activity,~~
21 ~~filings with the cabinet and the U.S. EPA, and compliance plans under the Kentucky~~
22 ~~SIP;~~

23 ~~— b. Includes fugitive emissions and emissions associated with startups, shutdowns,~~

1 and malfunctions; and

2 ~~— c. Excludes, in calculating any increase in emissions that results from a project, that~~
3 ~~portion of the unit's emissions following the project that an existing unit could have~~
4 ~~accommodated during the consecutive twenty four (24) month period used to establish~~
5 ~~the baseline actual emissions and that are also unrelated to the project, including any~~
6 ~~increased utilization due to product demand growth; or~~

7 ~~— 2. Elects to use the emissions unit's potential to emit, in tons per year, instead of~~
8 ~~using subparagraph 1 of this paragraph to determine projected actual emissions.~~

9 ~~— (200) "psia" means pounds per square inch absolute.~~

10 ~~— (201) "psig" means pounds per square inch gage.~~

11 ~~— (202) "RACT/BACT/LAER Clearinghouse" or "RBLC" means the U.S. EPA's online~~
12 ~~collection of previous RACT/BACT/LAER determinations.~~

13 ~~— (203) "Reactivation of a very clean coal-fired EUSGU" means a physical change or~~
14 ~~change in the method of operation associated with the commencement of commercial~~
15 ~~operations by a coal-fired utility unit after a period of discontinued operation if the unit:~~

16 ~~— (a) Has not been in operation for the two (2) year period between November 15,~~
17 ~~1988, and November 15, 1990, and the emissions from that unit continue to be carried~~
18 ~~in the Kentucky emissions inventory after November 15, 1990;~~

19 ~~— (b) Was equipped prior to shutdown with a continuous system of emissions control~~
20 ~~achieving a removal efficiency for sulfur dioxide of no less than eighty five (85) percent~~
21 ~~and a removal efficiency for particulates of no less than ninety eight (98) percent;~~

22 ~~— (c) Is equipped with low NOx burners prior to the time of commencement of~~
23 ~~operations following reactivation; and~~

1 ~~— (d) Is otherwise in compliance with the requirements of 42 U.S.C. 7401 to 7671q.~~

2 ~~— (204) "Reasonable further progress" means annual incremental reductions in~~
3 ~~emissions of the relevant air pollutant as required by 42 U.S.C. 7501 to 7515 or may~~
4 ~~reasonably be required by the U.S. EPA for the purpose of ensuring the attainment of~~
5 ~~the applicable ambient air quality standard by the applicable date specified.~~

6 ~~— (205) "Reconstruction" means the replacement of components of an existing~~
7 ~~affected facility to the extent that:~~

8 ~~— (a) The fixed capital cost of the new components exceeds fifty (50) percent of the~~
9 ~~fixed capital cost that would be required to construct a comparable entirely new affected~~
10 ~~facility; and~~

11 ~~— (b) It is technologically and economically feasible to meet the applicable~~
12 ~~requirements of 401 KAR Chapters 50 to 65.~~

13 ~~— (206) "Reference method" means a method of sampling and analyzing for an air~~
14 ~~pollutant as published in 40 C.F.R. Part 50, Appendices A to N; 40 C.F.R. Part 53; 40~~
15 ~~C.F.R. Part 60, Appendices A and B; 40 C.F.R. Part 61, Appendix B; or 40 C.F.R. Part~~
16 ~~63, Appendices A to D.~~

17 ~~— (207) "Regulated NSR pollutant" means the following:~~

18 ~~— (a) A pollutant for which a national ambient air quality standard has been~~
19 ~~promulgated and any constituents or precursors for such pollutants identified by the~~
20 ~~U.S. EPA;~~

21 ~~— (b) A pollutant subject to any standard promulgated under 42 U.S.C. 7411;~~

22 ~~— (c) A pollutant subject to a standard promulgated under or established by 42 U.S.C.~~
23 ~~7671 to 7671q; or~~

1 ~~— (d) A pollutant that otherwise is subject to regulation under 42 U.S.C. 7401 to~~
2 ~~7671q, except that any hazardous air pollutant (HAP) listed in 42 U.S.C. 7412 or added~~
3 ~~to the list pursuant to 42 U.S.C. 7412(b)(2), that has not been delisted pursuant to 42~~
4 ~~U.S.C. 7412(b)(3), is not a regulated NSR pollutant unless the listed HAP is also~~
5 ~~regulated as a constituent or precursor of a general pollutant listed under 42 U.S.C.~~
6 ~~7408.~~

7 ~~— (208) "Replacement unit" means an emissions unit that does not generate creditable~~
8 ~~emissions reductions by shutting down the existing emissions unit that is replaced, and~~
9 ~~that:~~

10 ~~— (a) 1. Is a reconstructed unit within the meaning of 40 C.F.R. 60.15(b)(1) or that~~
11 ~~completely takes the place of an existing emissions unit;~~

12 ~~— 2. Is identical to or functionally equivalent to the replaced emissions unit; and~~

13 ~~— 3. Does not alter the basic design parameters of the process unit.~~

14 ~~— (b) Replaces a unit that:~~

15 ~~— 1. Is permanently removed from the major stationary source, is otherwise~~
16 ~~permanently disabled, or is prohibited from operating by a permit that is enforceable as~~
17 ~~a practical matter; and~~

18 ~~— 2. If brought back into operation, is considered a new emissions unit.~~

19 ~~— (209) "Repowering" means:~~

20 ~~— (a) Replacement of an existing coal fired boiler with one (1) of the following clean~~
21 ~~coal technologies:~~

22 ~~— 1. Atmospheric or pressurized fluidized bed combustion;~~

23 ~~— 2. Integrated gasification combined cycle;~~

1 ~~— 3. Magneto hydrodynamics;~~

2 ~~— 4. Direct and indirect coal fired turbines;~~

3 ~~— 5. Integrated gasification fuel cells; or~~

4 ~~— 6. Pursuant to 40 C.F.R. 51.166, as determined by the U.S. EPA in consultation with~~
5 ~~the Secretary of Energy:~~

6 ~~— a. A derivative of one (1) or more of the technologies listed in subparagraphs 1 to 5~~
7 ~~of this paragraph; or~~

8 ~~— b. Another technology capable of controlling multiple combustion emissions~~
9 ~~simultaneously with improved boiler or generation efficiency and with significantly~~
10 ~~greater waste reduction relative to the performance of technology in widespread~~
11 ~~commercial use as of November 15, 1990.~~

12 ~~— (b) An oil or gas fired unit that has been awarded clean coal technology~~
13 ~~demonstration funding as of January 1, 1991 by the Department of Energy.~~

14 ~~— (c) A permit application from a source pursuant to this subsection receives~~
15 ~~expedited consideration by the cabinet and is granted an extension under 42 U.S.C.~~
16 ~~7651h.~~

17 ~~— (210) "Responsible official" means:~~

18 ~~— (a) For a corporation: a president, secretary, treasurer, or vice president of the~~
19 ~~corporation in charge of a principal business function, or other person who performs~~
20 ~~similar policy or decision making functions for the corporation, or a duly authorized~~
21 ~~representative of that person if the representative is responsible for the overall operation~~
22 ~~of one (1) or more manufacturing, production, or operating facilities applying for or~~
23 ~~subject to a permit; and~~

1 ~~1. The facilities employ more than 250 persons or have gross annual sales or~~
2 ~~expenditures exceeding \$25,000,000 in second quarter 1980 dollars; or~~

3 ~~2. The delegation of authority to the representative is approved in advance by the~~
4 ~~cabinet pursuant to this subsection;~~

5 ~~(b) For a partnership or sole proprietorship, a general partner or the proprietor,~~
6 ~~respectively;~~

7 ~~(c) For a municipality, state, federal, or other public agency, a principal executive~~
8 ~~officer or ranking elected official. The principal executive officer of a federal agency~~
9 ~~includes the chief executive officer having responsibility for the overall operation of a~~
10 ~~principal geographic unit of the agency; or~~

11 ~~(d) For the acid rain portion of a permit for an affected source, the designated~~
12 ~~representative.~~

13 ~~(211) "Run" means the net period of time, either intermittent or continuous within the~~
14 ~~limits of good engineering practice, when an emission sample is collected.~~

15 ~~(212) "S" means at standard conditions.~~

16 ~~(213) "sec" means second.~~

17 ~~(214) "Secondary emissions" means emissions that:~~

18 ~~(a) Occur as a result of the construction or operation of a major stationary source or~~
19 ~~major modification, and do not come from the major stationary source or major~~
20 ~~modification itself;~~

21 ~~(b) Are specific, well defined, quantifiable, and impact the same general area as the~~
22 ~~stationary source modification that causes the secondary emissions;~~

23 ~~(c) Include emissions from an offsite support facility that would not otherwise be~~

1 ~~constructed or increase its emissions as a result of the construction or operation of the~~
2 ~~major stationary source or major modification; and~~

3 ~~— (d) Do not include emissions that come directly from a mobile source, including~~
4 ~~emissions from the tailpipe of a motor vehicle, a train, or vessel.~~

5 ~~— (215) "Serious nonattainment county" or "serious nonattainment area" means a~~
6 ~~county or portion of a county designated serious nonattainment for the one (1) hour~~
7 ~~national ambient air quality standard for ozone in 401 KAR 51:010.~~

8 ~~— (216) "Severe nonattainment county" or "severe nonattainment area" means a~~
9 ~~county or portion of a county designated severe nonattainment for the one (1) hour~~
10 ~~national ambient air quality standard for ozone in 401 KAR 51:010.~~

11 ~~— (217) "Shutdown" means the cessation of an operation.~~

12 ~~— (218) "Significant" means:~~

13 ~~— (a) For 401 KAR 51:017, in reference to a net emissions increase or the potential of~~
14 ~~a source to emit any of the pollutants listed in the following table, a rate of emissions~~
15 ~~that would equal or exceed a corresponding rate listed in the table:~~

POLLUTANT	EMISSIONS RATE
Carbon monoxide	100 tons per year (tpy)
Ozone—depleting substance	100 tpy
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy

Particulate matter	25 tpy of particulate matter emissions
	15 tpy of PM ₁₀ emissions
Ozone	40 tpy of volatile organic compounds or nitrogen oxides
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy

Municipal waste combustor organics (measured as total tetra through octa chlorinated dibenzo p dioxins and dibenzofurans)	3.2 x 10 ⁻⁶ megagrams per year (Mg/y) (3.5 x 10 ⁻⁶ tpy)
Municipal waste combustor metals (measured as particulate matter)	14 Mg/y (15 tpy)
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	36 Mg/y (40 tpy)
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	35 Mg/y (50 tpy)

- 1 — (b) For 401 KAR 51:017, in reference to a net emissions increase or the potential of
- 2 a source to emit a regulated NSR pollutant that is not listed in the table in paragraph (a)

1 of this subsection, any emissions rate.

2 ~~— (c) For 401 KAR 51:017, in reference to an emissions rate or a net emissions~~
3 ~~increase associated with a major stationary source or major modification, that is to be~~
4 ~~constructed within ten (10) kilometers of a Class I area, an impact on that area equal to~~
5 ~~or greater than one (1) $\mu\text{g}/\text{m}^3$ over a twenty-four (24) hour average.~~

6 ~~— (d) For 401 KAR 51:052, in reference to a net emissions increase or the potential of~~
7 ~~a source to emit any of the pollutants listed in the following table, a rate of emissions~~
8 ~~that would equal or exceed a corresponding rate listed in the table:~~

POLLUTANT	EMISSIONS RATE
Carbon monoxide	100 tons per year (tpy)
Ozone depleting substance	100 tpy
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Ozone	40 tpy of volatile organic compounds or nitrogen oxides
Lead	0.6 tpy

9 ~~— (e) For 401 KAR 51:052, with the exception of the significant emissions rate for~~
10 ~~ozone in this subsection, significant means, in reference to an emissions increase or net~~
11 ~~emissions increase, a rate of emissions that exceeds the following:~~

12 ~~— 1. Twenty-five (25) tons per year of volatile organic compounds or nitrogen oxides in~~

1 a serious or severe ozone nonattainment area; or

2 ~~— 2. Any increase in actual emissions of volatile organic compounds or nitrogen~~
3 ~~oxides in an extreme ozone nonattainment area.~~

4 ~~— (f) For 401 KAR 51:052, with the exception of the significant emissions rate for~~
5 ~~carbon monoxide in this subsection, significant means, in reference to an emissions~~
6 ~~increase or net emissions increase, a rate of emissions of carbon monoxide that equals~~
7 ~~or exceeds fifty (50) tons per year in a serious nonattainment area for carbon monoxide~~
8 ~~in which a stationary source contributes significantly to carbon monoxide levels.~~

9 ~~— (219) "Significant emissions increase" means, for a regulated NSR pollutant, an~~
10 ~~increase in emissions that is equal to or greater than the emission level that is~~
11 ~~significant for that pollutant.~~

12 ~~— (220) "Significant emissions unit" means an emissions unit that emits or has the~~
13 ~~potential to emit a PAL pollutant in an amount equal to or greater than the applicable~~
14 ~~significant level as defined in subsection (218) of this section or in 42 U.S.C. 7401 to~~
15 ~~7671q, whichever is lower for that PAL pollutant, but less than the amount that would~~
16 ~~qualify the unit as a major emissions unit.~~

17 ~~— (221) "Small emissions unit" means an emissions unit that emits or has the potential~~
18 ~~to emit the PAL pollutant in an amount less than the PAL pollutant's applicable~~
19 ~~significant level as defined in subsection (218) of this section; or in 42 U.S.C. 7401 to~~
20 ~~7671q, whichever is lower.~~

21 ~~— (222) "SO₂" means sulfur dioxide.~~

22 ~~— (223) "Source" means one (1) or more affected facilities contained within a given~~
23 ~~contiguous property line, which means the property is separated only by a public~~

1 ~~thoroughfare, stream, or other right of way.~~

2 ~~— (224) "sq" means square.~~

3 ~~— (225) "Stack or chimney" means a flue, conduit, or duct arranged to conduct~~
4 ~~emissions to the atmosphere.~~

5 ~~— (226) "Standard" means an emission standard, a standard of performance, or an~~
6 ~~ambient air quality standard as promulgated in 401 KAR Chapters 50 to 65 or the~~
7 ~~emission control requirements necessary to comply with 401 KAR Chapter 51.~~

8 ~~— (227) "Standard conditions" means:~~

9 ~~— (a) For source measurements, twenty (20) degrees Celsius (sixty-eight (68) degrees~~
10 ~~Fahrenheit) and a pressure of 760 mm Hg (29.92 in. of Hg).~~

11 ~~— (b) For air quality determinations, twenty-five (25) degrees Celsius (seventy-seven~~
12 ~~(77) degrees Fahrenheit) and a reference pressure of 760 mm Hg (29.92 in. of Hg).~~

13 ~~— (228) "Start up" or "startup" means the setting in operation of an affected facility.~~

14 ~~— (229) "State implementation plan" or "SIP" means the most recently prepared plan~~
15 ~~or revision required by 42 U.S.C. 7410 that has been approved by the U.S. EPA.~~

16 ~~— (230) "Stationary source" means a building, structure, facility, or installation that~~
17 ~~emits or may emit a regulated NSR pollutant.~~

18 ~~— (231) "Submit" means to send or transmit a document, information, or~~
19 ~~correspondence in accordance with an applicable requirement.~~

20 ~~— (232) "TAPPI" means Technical Association of the Pulp and Paper Industry.~~

21 ~~— (233) "Temporary clean coal technology demonstration project" means a clean coal~~
22 ~~technology demonstration project operated for a period of five (5) years or less and that~~
23 ~~complies with the Kentucky SIP and with other requirements necessary to attain and~~

1 ~~maintain the national ambient air quality standards during and after the project is~~
2 ~~terminated.~~

3 ~~— (234) "Ton" or "tonnage" means, for a NOx budget source, a short ton or 2,000~~
4 ~~pounds. For determining compliance with the NOx budget emissions limitation, total~~
5 ~~tons for a control period is calculated as the sum of all recorded hourly emissions, or the~~
6 ~~tonnage equivalent of the recorded hourly emissions rates, in accordance with 40~~
7 ~~C.F.R. Part 96, Subpart H with any remaining fraction of a ton equal to or greater than~~
8 ~~0.50 ton deemed to equal one (1) ton and any fraction of a ton less than 0.50 ton~~
9 ~~deemed to equal zero tons.~~

10 ~~— (235) "Total suspended particulates" or "TSP" means particulate matter as~~
11 ~~measured by the method described in 40 C.F.R. Part 50, Appendix B.~~

12 ~~— (236) "tpy" means tons per year.~~

13 ~~— (237) "TSS" means total suspended solids.~~

14 ~~— (238) "Uncombined water" means water that can be separated from a compound by~~
15 ~~ordinary physical means and that is not bound to a compound by internal molecular~~
16 ~~forces.~~

17 ~~— (239) "Unit" means a fossil fuel-fired stationary boiler, combustion turbine, or~~
18 ~~combined cycle system.~~

19 ~~— (240) "Urban county" means a county that is a part of an urbanized area with a~~
20 ~~population greater than 200,000 based upon the 1980 census. If a portion of a county is~~
21 ~~a part of an urbanized area, then the entire county is classified as urban for 401 KAR~~
22 ~~Chapters 50 to 65.~~

23 ~~— (241) "Urbanized area" means an area defined by the U.S. Department of~~

1 Commerce, Bureau of Census.

2 ~~— (242) "U.S. EPA" means the United States Environmental Protection Agency.~~

3 ~~— (243) "UTM" means Universal Transverse Mercator.~~

4 ~~— (244) "Visibility impairment" means a humanly perceptible change in visibility such~~
5 ~~as visual range, contrast, or coloration, from that which would have existed under~~
6 ~~natural conditions.~~

7 ~~— (245) "Volatile organic compound" or "VOC" is defined in 40 C.F.R. 51.100(s).~~

8 ~~— (246) "yd" means yard.]~~

9 Section 2. Incorporation by Reference. (1) **"North American Industry**
10 **Classification System", 2007, as published by the Office of Management and**
11 **Budget is incorporated by reference.**

12 ~~— (2)~~ "Standard Industrial Classification Manual", 1987, as published by the Office of
13 Management and Budget is incorporated by reference.

14 **(3) [(2)]** This material may be inspected, copied or obtained, subject to applicable
15 copyright law, at the following main and regional offices of the Kentucky Division for Air
16 Quality during the normal working hours of 8 a.m. to 4:30 p.m., local time:

17 (a) Kentucky Division for Air Quality, 200 Fair Oaks Lane, 1st floor, Frankfort,
18 Kentucky 40601-1403, (502) 564-3999;

19 (b) Ashland Regional Office, 1550 Wolohan Drive, Suite 1, Ashland, Kentucky
20 41102, (606) 929-5285;

21 (c) Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky
22 42104, (270) 746-7475;

23 (d) Florence Regional Office, 8020 Veterans Memorial Drive, Suite 110, Florence,

1 Kentucky 41042, (859) 525-4923;

2 (e) Frankfort Regional Office, 200 Fair Oaks Lane, Third Floor, Frankfort,
3 Kentucky 40601, (502) 564-3358; ~~[643 Teton Trail, Suite B, Frankfort, Kentucky~~
4 ~~40601, (502) 564-3358;]~~

5 (f) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky 41701,
6 (606) 435-6022;

7 (g) London Regional Office, 875 S. Main Street, London, Kentucky 40741, (606)
8 330-2080;

9 (h) Owensboro Regional Office, 3032 Alvey Park Drive, W., Suite 700, Owensboro,
10 Kentucky 42303, (270) 687-7304; and

11 (i) Paducah Regional Office, 130 Eagle Nest Drive, Paducah, Kentucky 42003,
12 (270) 898-8468.

13 (4) [(3)] The Standard Industrial Classification Manual is also available under Order
14 No. PB 87-100012 from the National Technical Information Service, 5285 Port Royal
15 Road, Springfield, Virginia 22161, phone (703) 487-4650.

10/14/10

Date

Henry C. A. Lutz Jr.

Leonard K. Peters, Secretary
Energy and Environment Cabinet

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 51:001

Contact person: Laura Lund, Environmental Technologist II

(1) Provide a brief summary of:

- (a) What this administrative regulation does:** This administrative regulation defines the terms used in 401 KAR Chapter 51.
- (b) The necessity of this administrative regulation:** This administrative regulation provides clear and consistent definitions for terms used in 401 KAR Chapter 51.
- (c) How this administrative regulation conforms to the content of the authorizing statutes:** The statutory authority for this regulation is given in KRS 224.10-100(5), which provides the cabinet the authority, power, and duty to prevent and control air pollution. The definitions contained in this administrative regulation are not more stringent or otherwise different than the corresponding federal definitions.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:**
This administrative regulation assists the public and the regulated community by providing clear and consistent definitions for terms used in 401 KAR Chapter 51.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

- (a) How the amendment will change this existing administrative regulation:** This amendment revises definitions to reflect amendments made to the New Source Review (NSR) program at the federal level. The *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule* (Tailoring Rule), published as a final rule on June 3, 2010, amends and creates definitions that significantly impact the Prevention of Significant Deterioration (PSD) and Title V permitting programs. The amendments are to the definitions for "Regulated NSR pollutant", which includes greenhouse gases (GHGs) as a regulated NSR pollutant under the Clean Air Act, and the inclusion of a definition for "subject to regulation", which includes the greenhouse gas emission thresholds to trigger PSD permitting. This regulation is also being amended to conform to KRS Chapter 13A.
- (b) The necessity of the amendment to this administrative regulation:**
The definition amendments are necessary at the state level to ensure consistency between state and federal programs. The Tailoring Rule establishes January 2, 2011, as the trigger date for GHGs to become regulated. The U.S. EPA found Kentucky's State Implementation Plan (SIP) deficient on September 2, 2010 (75 FR 53892) because it was determined the Kentucky does not have authority to issue PSD permits for

GHGs. If Kentucky's GHG SIP revision is not in place by March 31, 2011, the Commonwealth will become subject to the Federal Implementation Plan, which was also issued on September 2, 2010 (75 FR 53883). Serious consequences of a FIP include loss of PSD and Title V program approvals and loss of federal highway funds. EPA clearly states their intent in the preamble to SIP call: "For any state that lacks the ability to issue PSD or Title V permits for GHG emissions sources consistent with the final rule, we [EPA] intend to undertake a separate action to call for revisions to these programs. We [EPA] also intend to move quickly to impose a FIP for PSD through 40 CFR 52.21, and use our federal Title V authority to ensure that GHG sources will be permitted consistent with the final rule." This amendment also clarifies that small businesses will not be regulated solely because of their greenhouse gas emissions by tailoring the threshold limits.

- (c) **How the amendment conforms to the content of the authorizing statutes:** This amendment maintains consistency with corresponding federal definitions affecting Kentucky's PSD and Title V permitting programs.
 - (d) **How the amendment will assist in the effective administration of statutes:** This amendment will provide clear and consistent definitions of terms used in 401 KAR Chapter 51 to prevent and control air pollution.
- (3) **List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation:** The amendments to this administrative regulation affects any facility with the capacity to emit greenhouse gases at or above the thresholds specified in the GHG Tailoring Rule. This includes PSD and Title V sources of greenhouse gas emissions but does not affect smaller emitters of greenhouse gases. EPA has estimated that without the Tailoring Rule there would be 82,000 permitting actions nationwide per year necessary to address greenhouse gas emissions, but with the implementation of the rule that number is reduced to 1,600 nationwide. The Division for Air Quality has estimated this regulation amendment to affect 30 – 40 permitting actions per year in Kentucky. If these amendments are not made, Kentucky's permitting authority for these sources will become void.
- (4) **Provide an assessment of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:** Amendments to the current regulation will include the regulation of greenhouse gas emissions. For those sources emitting at or above the major source threshold for greenhouse gas emissions, new permits will have to be issued.
 - (a) **List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment:** Sources permitted under the Title V program will have to submit a permit application identifying and reporting the emissions but there will be no new requirements or standards imposed on

the source. Sources permitted under the PSD program will have to submit a permit application including Best Available Control Technology (BACT) review for greenhouse gas emissions.

- (b) **In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3):** There are no emission fees associated with the regulation of greenhouse gas emissions. The emission fee requirements of 401 KAR 50:038 do not apply to greenhouse gas emissions or carbon dioxide equivalent at this point. For those sources that must provide a BACT analysis, there is the additional cost to meet the requirements of the BACT determination. As BACT has not yet been established, it is unknown what these costs may be, since BACT determinations are project specific. Additionally, sources required to obtain a new permit will have the expense of completing a permit application. EPA has estimated that a Title V permit application for greenhouse gas sources would cost each source, on average, between \$23,200 and \$46,400.
 - (c) **As a result of compliance, what benefits will accrue to the entities identified in question (3):** These major sources will remain in compliance with state and federal regulations. The cabinet will remain the permitting authority for air quality permits, with permit applications being submitted directly to the cabinet rather than to the U.S. EPA.
- (5) **Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:**
- (a) **Initially:** The inclusion of greenhouse gases in stationary source permits will require the Division for Air Quality to expand staff to review the increased permit load and inspect changes made to sources as a result of this regulation.
 - (b) **On a continuing basis:** The cabinet must maintain the additional staff in order to handle the increase in permit issuance. EPA has estimated that a Title V permit application for greenhouse gas sources would cost a permitting authority, on average, between \$9,844 and \$19,688 to process each source permit.
- (6) **What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:** Any additional expense incurred by the Division for Air Quality to regulate greenhouse gas emissions would be paid for through current agency funds. The cabinet is not requesting additional general funds for the implementation and enforcement of the regulation. With this promulgation, there will be no emissions fees for GHG emissions. In Phase I of the federal mandate, there are no additional emission fees associated with GHG emissions. However, sources that are brought under PSD or Title V permitting during Phases II and III of the federal mandate solely because of GHG emissions will be subject to Title V emission fees for particulate matter, SO₂, NO_x, and VOC emissions.

- (7) **Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment.** The cabinet is not requesting additional general funds for the implementation of this administrative regulation. However, Title V emission fees may be impacted by the implementation of this administrative regulation, as stated above in paragraph 6.
- (8) **State whether or not this administrative regulation established any fees or directly or indirectly increased any fees.** This administrative regulation does not establish fees, but as stated above in (7), Title V emission fees may be impacted.
- (9) **TIERING: Is tiering applied?** Yes. The Tailoring Rule amends the threshold of greenhouse gas emission levels subject to regulation. This tiering revision was necessary to prevent small businesses and individuals from becoming subject to permitting requirements solely due to greenhouse gas emissions.

FEDERAL MANDATE ANALYSIS COMPARISON

- 1. Federal statute or regulation constituting the federal mandate.** As a SIP-approved state for the PSD program under 40 CFR 51.166, recent changes in the federal PSD/NSR and Title V programs make it necessary to revise the regulation in order to maintain federal approvability. Failure to do so will result in a Federal Implementation Plan.
- 2. State compliance standards.** The state compliance standards are found in KRS 224.10-100(5).
- 3. Minimum or uniform standards contained in the federal mandate.** Changes in the federal definitions for this program necessitate amendments in the state definitions.
- 4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements, than those required by the federal mandate?** No.
- 5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements.** The definitions contained in this administrative regulation are not more stringent or otherwise different than the corresponding federal definitions.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Administrative Regulation #: 401 KAR 51:001

Contact person: Laura Lund, Environmental Technologist II

- 1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes.**
- 2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation?** This administrative regulation impacts the Division for Air Quality as the applicability of other administrative regulations is altered. Any state or local government that emits greenhouse gases in the thresholds subject to the PSD or Title V permitting programs would be required to obtain a permit from the Division for Air Quality.
- 3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation.** KRS 224.10-100(5), (26); 42 U.S.C. 7401, 7410, 7471, 7607; 40 CFR 51.166.
- 4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.**
 - (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year?** This administrative regulation does not generate revenue, but Title V fees may be impacted by the implementation of this regulation.
 - (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years?** This administrative regulation does not generate revenue, but Title V fees may be impacted by the implementation of this regulation.
 - (c) How much will it cost to administer this program for the first year?** The U.S. EPA has estimated that it will cost the permitting authority between \$9,844 and \$19,688 per permit issued, and the Division for Air Quality has estimated 30 – 40 permit actions per year. Therefore, it is estimated that an increase of between \$300,000 and \$800,000 will be necessary to operate this program.
 - (d) How much will it cost to administer this program for subsequent years?** The U.S. EPA has estimated that it will cost the permitting authority between \$9,844 and \$19,688 per permit issued, and the Division for Air Quality has estimated 30 – 40 permit actions per year. Therefore, it is estimated that an increase of between \$300,000 and \$800,000 will be necessary to operate this program.